Sykt Pembinaan Anggerik Sdn Bhd v Malaysia Airports Holdings Bhd

HIGH COURT (SHAH ALAM) — CIVIL SUIT NO BA-22C-23–04 OF 2017
TEE GEOK HOCK JC
26 NOVEMBER 2021

Contract — Building contract — Claim for work done — Whether apart from payment for work done, plaintiff was entitled to acceleration costs, prolongation costs and finance charges — Whether defendant entitled to liquidated and ascertained damages in respect of plaintiff's delayed completion of works — Whether defendant caused/contributed to the delay in completion

The defendant appointed the plaintiff as the main contractor to carry out construction works at the Penang International Airport. The project was divided into two phases — Package 1, involving the erection of a site office and a central utilities building ('CUB') and the carrying out of airside drainage works ('ADW'), and Package 2, involving the construction/upgrading of the terminal building, transfer corridor and passenger boarding bridge. In the instant action, the plaintiff sought to recover about RM67m for work done on the project as well as for prolongation costs, acceleration costs and financing charges. The defendant denied the plaintiff's claim and counterclaimed for RM9,694,000 as liquidated and ascertained damages ('LAD') in respect of the plaintiff's delayed completion of the CUB and ADW works in Package 1.

Held, (a) ordering the defendant to pay the plaintiff RM1,286,521.50 in respect of Package 1 (ie, after deducting RM750,000 payable to the defendant as LAD for delayed completion of the ADW works) with interest thereon at 5%pa from 14 July 2014 until date of full payment; (b) ordering the defendant to pay the plaintiff RM8,642,914.73 in respect of Package 2 with interest thereon at 5%pa from 27 June 2015 until date of full payment; and (c) dismissing the plaintiff's claims for acceleration costs, prolongation costs and financing charges:

(1) The court found that the total value of works done and materials delivered under Package 1 (Site Office, CUB and ADW) was RM20,148,621.50 out of which the defendant had paid the plaintiff RM18,112,100, leaving a balance of RM2,036,521.50 still due and payable. However, in respect of the ADW works, the plaintiff was liable to pay the defendant LAD amounting to RM750,000 for delayed completion. After setting off that LAD sum against the

RM2,036,521.50, the amount the defendant had to pay the plaintiff was RM1,286,521.50 with interest thereon at 5%pa from 14 July 2014 until date of full payment (see para 30).

(2) As for Package 2, the defendant was liable to pay the plaintiff RM8,642,914.73, being the difference between the total value of works done and materials delivered (RM181,449,614.73) and the amount the defendant had paid the plaintiff (RM172,806,700). Interest on the amount payable was to run at 5%pa from 27 June 2015 until date of full payment (see para 30).

(3) The plaintiff failed to prove its claim for acceleration costs under Package 2. The legal bases for such a claim was either: (a) a breach of contract and foreseeable loss caused thereby under s 74 of the Contracts Act 1950; or (b) instruction by the Superintending Officer ('SO') or his representative which caused the plaintiff to accelerate execution of its works and incur extra loss and expenses and pursuant to a loss/expense clause in the contract. The plaintiff failed to establish either of those legal bases in the instant case and also failed to prove the alleged special damages incurred by the alleged acceleration of works. The law required the plaintiff to prove a causal link between the extra loss it had incurred and the breach of contract/instruction from the SO but the plaintiff failed to establish that link (see paras 30, 198, 200–201 & 213–215).

(4) The plaintiff was not entitled to prolongation costs as it had failed to meet the mandatory pre-conditions set out under cll 43 and/or 44 of the main contract in order to claim such costs. Furthermore, there was also no proof with specific evidence of the quantum of the alleged prolongation costs and the causal link between the alleged heads of prolongation costs and the delay event (see paras 30 & 267).

(5) There was no valid basis for the court to consider or award special damages to the plaintiff in the form of finance charges because the plaintiff had not proven that it had taken any bank loan or credit facilities and the actual amount of financing charges that it had paid or was liable to pay to banks and/or lenders (see paras 30 & 297–309).

(6) The defendant's RM444,000 LAD counterclaim in respect of the CUB work had to be dismissed because circumstances beyond the plaintiff's control had prevented it from completing the CUB works by 29 July 2011. Other independent contractors, outside of the plaintiff's scope of contract, had not completed their respective works in relation to the building and, in the circumstances, the plaintiff ought to have been given an extension of time until 11 October 2011 (when the certificate of practical completion was issued) to complete the CUB works (see paras 30, 278–279 & 281–284).

(7) In respect of the defendant's RM9,250,000 LAD counterclaim for late completion of the ADW works, the court found that the circumstances of the case entitled the plaintiff to an extension of time ('EOT') until 30 April 2014 to complete the works. But even if the plaintiff was not entitled to the EOT due to any technical or procedural reason, the defendant was not entitled to any LAD for any period before 30 April 2014 because it had contributed to, or had jointly caused, the delay in completion of the ADW works and could not seek to benefit from its own wrong. The defendant was, however, entitled to obtain LAD in respect of the ADW works from 1 May 2014 until 14 July 2014 (the date of the certificate of practical completion). Under Package 1, the agreed LAD rate for the ADW works was RM10,000 per day. Hence, for the 75-day delay, the defendant was entitled to LAD amounting to RM750,000 (see paras 30 & 291–297).

[Bahasa Malaysia summary

Defendan telah melantik plaintif sebagai kontraktor utama untuk menjalankan kerja-kerja pembinaan di Lapangan Terbang Antarabangsa Pulau Pinang. Projek ini dibahagikan kepada dua fasa — Pakej 1, yang melibatkan pembinaan pejabat tapak dan bangunan utiliti pusat ('CUB') dan menjalankan kerja-kerja saliran tepi udara ('ADW'), dan Pakej 2, yang melibatkan pembinaan/naik taraf bangunan terminal, koridor pemindahan dan jambatan penumpang. Dalam tindakan ini, plaintif menuntut semula sejumlah RM67 juta untuk kerja-kerja yang dilakukan ke atas projek tersebut serta untuk kos berlarutan, kos penyegeraan projek dan caj pembiayaan. Defendan membantah tuntutan plaintif dan menuntut balas ganti rugi sebanyak RM9,694,000 sebagai ganti rugi yang dicairkan dan yang ditentukan ('LAD') berhubung dengan kelewatan plaintif menyelesaikan kerja-kerja CUB dan ADW di dalam Pakej 1.

Diputuskan, (a) memerintahkan defendan membayar plaintif RM1,286,521.50 untuk Pakej 1 (iaitu, selepas menolak RM750,000 yang perlu dibayar kepada defendan sebagai LAD untuk kelewatan penyiapan kerja-kerja ADW) dengan faedah ke atasnya pada kadar 5% dari 14 Julai 2014 sehingga tarikh penyelesaian penuh; (b) memerintahkan defendan membayar plaintif RM8, 642,914.73 untuk Pakej 2 dengan faedah ke atasnya pada kadar 5% dari 27 Jun 2015 sehingga tarikh penyelesaian penuh; dan (c) menolak tuntutan plaintif untuk kos berlarutan, kos penyegeraan projek dan caj pembiayaan:

(1) Mahkamah ini mendapati bahawa jumlah nilai kerja yang dilakukan dan bahan-bahan yang dihantar di bawah Pakej 1 (Pejabat Tapak, CUB dan ADW) adalah RM20,148,621.50 di mana defendan telah membayar plaintif RM18,112,100, meninggalkan baki sebanyak RM2,036,521.50 masih perlu dibayar dan perlu dibayar. Walau bagaimanapun, berhubung

dengan kerja-kerja ADW, plaintif bertanggungjawab untuk membayar defendan LAD berjumlah RM750,000 untuk penyelesaian yang tertangguh. Selepas mengetepikan jumlah LAD terhadap RM2,036,521.50, jumlah yang perlu dibayar oleh defendan kepada plaintif adalah RM1,286,521.50 dengan faedah ke atasnya pada kadar 5% setahun dari 14 Julai 2014 sehingga tarikh bayaran penuh (lihat perenggan 30).

(2) Bagi Pakej 2, defendan bertanggungjawab membayar plaintif sebanyak RM8,642,914.73, iaitu perbezaan antara jumlah nilai kerja yang dilakukan dan bahan yang dihantar (RM181,449,614.73) dan jumlah yang telah dibayar oleh defendan kepada plaintif (RM172,806,700). Faedah ke atas amaun yang perlu dibayar adalah untuk dijalankan pada kadar 5% setahun dari 27 Jun 2015 sehingga tarikh peneyelesaian penuh (lihat perenggan 30).

(3) Plaintif telah gagal membuktikan tuntutannya untuk kos penyegeraan projek di bawah Pakej 2. Asas undang-undang bagi tuntutan tersebut adalah sama ada: (a) pelanggaran kontrak dan kerugian yang boleh dipralihat seperti yang diperuntukkan di bawah s 74 Akta Kontrak 1950; atau (b) arahan oleh Pegawai Superintendan ('PS') atau wakilnya yang menyebabkan plaintif mempercepatkan pelaksanaan kerja-kerjanya dan menanggung kerugian dan perbelanjaan tambahan dan menurut klausa kerugian/perbelanjaan dalam kontrak. Plaintif telah gagal membuktikan salah satu asas undang-undang dalam kes ini dan juga gagal membuktikan tuntutan ganti rugi khas yang ditanggung atas tuntutan penyegeraan projek tersebut. Undang-undang menghendaki plaintif membuktikan hubungan sebab antara kerugian tambahan dan pelanggaran kontrak/arahan dari SP namunplaintif gagal mewujudkan hubungan tersebut (lihat perenggan 30, 198, 200–201 & 213–215).

(4) Plaintif tidak berhak untuk kos lanjutan kerana telah gagal memenuhi prasyarat mandatori yang ditetapkan di bawah klausa 43 dan/atau 44 kontrak utama untuk menuntut kos tersebut. Tambahan pula, tiada bukti khusus mengenai kuantum kos lanjutan tersebut dan hubungan kausa antara kos pemanjangan dan peristiwa yang kelewatan tersebut (lihat perenggan 30 & 267).

(5) Tidak ada asas yang sah bagi mahkamah ini untuk mempertimbangkan atau memberikan ganti rugi khas kepada plaintif dalam bentuk caj pembiayaan kerana plaintif gagal membuktikan bahawa mereka telah memohon pinjaman bank atau kemudahan kredit dan jumlah sebenar caj pembiayaan yang telah dibayar atau bertanggungjawab untuk membayar kepada bank dan/atau pemberi pinjaman (lihat perenggan 30 & 299–303).

(6) Tuntutan balas untuk LAD berjumlah RM444,000 oleh defendan

mengenai kerja CUB ditolak kerana keadaan telah berlaku di luar kawalan plaintif yang menghalangnya daripada menyelesaikan kerja CUB pada 29 Julai 2011. Kontraktor bebas lain, di luar skop kontrak plaintif, tidak menyelesaikan kerja masing-masing berhubung dengan bangunan dan, dalam keadaan itu, plaintif sepatutnya diberi lanjutan masa sehingga 11 Oktober 2011 (apabila sijil siap praktikal dikeluarkan) untuk menyelesaikan kerja-kerja CUB tersebut (lihat perenggan 30, 278–279 & 281–284).

(7) Berhubung tuntutan balas untuk LAD berjumlah RM9,250,000 oleh defendan untuk kelewatan menyiapkan kerja-kerja ADW, mahkamah ini mendapati bahawa keadaan kes tersebut memberi hak kepada plaintif untuk lanjutan masa ('EOT') sehingga 30 April 2014 untuk menyelesaikan kerja-kerja tersebut. Walaupun plaintif tidak berhak mendapat EOT atas sebab teknikal atau prosedur, defendan tidak berhak kepada mana-mana LAD untuk tempoh sebelum 30 April 2014 kerana mereka telah menyumbang atau telah bersama-sama menyebabkan, kelewatan dalam menyelesaikan kerja-kerja ADW dan defendan tidak boleh mendapat manfaat atas kesalahannya sendiri. Defendan, bagaimanapun, berhak untuk mendapatkan LAD berkenaan dengan kerja-kerja ADW dari 1 Mei 2014 hingga 14 Julai 2014 (tarikh sijil penyelesaian praktikal). Di bawah Pakej 1, kadar LAD yang dipersetujui untuk kerja-kerja ADW adalah RM10,000 sehari. Oleh itu, untuk penangguhan 75 hari, defendan berhak mendapat LAD berjumlah RM750,000 (lihat perenggan 30 & 291–297).]

Cases referred to

Bunning Bros v Manea (1911) 13 WALR 148 (refd)
Dodd v Churton [1897] 1 QB 562, CA (refd)
FG Minter Ltd v Welsh Health Technical Services Organisation (1980) 13 BLR 1 (refd)
Gimstern Corporation (M) Sdn Bhd & Anor v Global Insurance Co Sdn Bhd [1987] 1 MLJ 302; [1987] CLJ Rep 102, SC (refd)
Golden Vale Gold Range & Country Club Sdn Bhd v Hong Huat Enterprise Sdn Bhd (Airport Auto Centre Sdn Bhd & Anor, third party and another appeal) [2008] 4 MLJ 839; [2008] 6 CLJ 31, CA (refd)
KL Eco City Sdn Bhd v Tuck Sin Engineering & Construction Sdn Bhd & Anor [2020] MLJU 2457, HC (refd)
Kerajaan Malaysia (Jabatan Kerja Raya) v Global Globe (M) Sdn Bhd [2019] 1 MLJ 281; [2019] 9 CLJ 191, CA (refd)
Leyland (Frederick) & Co Ltd v Compania Panamena Europea Navigacion Ltda [1943] 76 Lloyd's Report 113, CA (refd)
Lodder v Slowey [1904] AC 442, PC (refd)
Multiplex Constructions (UK) v Honeywell Control Systems 111 ConLR 78, QBD (refd)

PBLT Sdn Bhd v Prestasi Reka Sdn Bhd & Ors [2020] MLJU 2056, HC (refd)
Panamena Europea Navigacion (Compania Ltda) v Frederick Leyland & Co Ltd (J Russell & Co) [1947] AC 428, HL (refd)
Pembinaan Limbongan Setia Berhad v Josu Engineering Construction Sdn Bhd [2020] MLJU 192; [2020] 1 LNS 111, HC (refd)
Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd [2016] 4 MLJ 570, CA (folld)
Rees & Kirby Ltd v Swansea City Council (1985) 30 BLR 1 (refd)
Roberts v The Bury Improvement Commissioners (1869) LR 4 CP 755 (refd)
SMK Cabinets v Hili Modern Electrics Pty Ltd [1984] VR 391 (refd)
Sunissa Sdn Bhd v Kerajaan Malaysia & Anor [2020] MLJU 283, HC (refd)
Syarikat Tan Kim Beng & Rakan-Rakan v Pulai Jaya Sdn Bhd [1992] 1 MLJ 42; [1991] 1 LNS 52, HC (refd)
Yuk Tung Construction Sdn Bhd v Daya Cmt Sdn Bhd and another appeal [2020] MLJU 1084; [2020] 1 LNS 1314, CA (refd)

Legislation referred to

Contracts Act 1950 s 29
Evidence Act 1950 s 90A, 90A(2), (4)

Mahathir Abdullah (Mahathir) for the plaintiff.
Loshini Ramasamy (Eric Gomez with her) (Skrine) for the defendant.

Tee Geok Hock JC:

INTRODUCTION

[1] Projects on construction or upgrading of airports seem to be fertile grounds for numerous claims and disputes which take up much of the courts' time and resources in hearing the trials and the litigation proceedings.

[2] In spite of the existence of an arbitration clause in both the construction contracts in question, this action involving numerous claims and disputes and many boxes of documents (running into about 90 thick bundles of documents) has by the parties' choice and election landed in this court for full trial.

[3] Sensing that a full-blown full trial on all liability and quantum issues would most probably take more than 30 days, this court in early 2020 started to carry out intensive case management sessions with a view to reducing the number and extent of issues in dispute.

[4] After some intensive case management sessions and with the cooperation of both parties' respective solicitors, the items in disputes were narrowed down with many of the quantum figures mutually agreed without prejudice to

dispute of liability, and the oral evidence at the full trial for 14 days was mainly on the liability issues and a short trial session on quantum issues which remain in dispute. Commendation should be accorded to the advocates and solicitors for respective parties in the present case for their cooperation with the court in narrowing down many of the quantum disputes at the pre-trial stage and in facilitating saving of much of the court's precious time and resources in smooth and expeditious disposal of the disputes in the present case. A valuable lesson to be learned from this is that before the court's decision on liability is indicated or pronounced, it is relatively much easier to get the parties to agree on quantum figures without prejudice to liability disputes. Human nature is such that if the liability decision is known, it would be much more difficult for the party who loses on the liability issue to agree to any quantum figure which is claimed by the other party who is successful on liability issue and, likewise, it would also be much more difficult for the party who succeeds on the liability issue to agree to figures lower than what they have claimed and pleaded.

BRIEF BACKGROUND

[5] The plaintiff was appointed by the defendant as main contractor for the projects known as the 'Proposed Development and Upgrading Works at Penang International Airport, Bayan Lepas, Pulau Pinang' ('Package 2' or 'the main contract') as well as the 'Proposed Construction and Completion of Site Office, Central Utilities Building and Airside Drainage Works at Penang International Airport ('Package 1' or 'supplementary contract') (collectively, 'the project').

[6] In respect of Package 2 (Main Terminal Building and Associated Works), the appointment was effected through the execution of articles of agreement dated 2 September 2010 by the parties, with conditions of contract and bills of quantities. See pp 412–837, AA3, pp 838–1,204, AA4 and pp 1205–1589, AA5.

[7] The main contract (Package 2) is based upon the standard form of PWD 203A *Conditions of Contract* (1983 Ed) with the bills of quantities forming part of the contract without any amendments or amplifications.

[8] Clause 2 of the articles of agreement of the main contract (Package 2) read together with cl 1 of the conditions of contract of the main contract provides that the following documents shall be deemed to form and be read and construed as part of the contract (AA3/418):

(a) articles of agreement;

(b) letter of acceptance of tender;

(c) form of tender;

(d) conditions of contract and the appendix annexed thereto;

(e) contract drawings;

(f) bills of quantities;

(g) specifications;

(h) summary of tender; and

(i) extracts of employer's procurement policies and procedures.

[9] In respect of Package 1 (Site Office CUB and ADW), the appointment was effected through the issuance of a letter of acceptance dated 13 January 2011 by the defendant to the plaintiff, which the plaintiff accepted and which led to the execution of a supplemental agreement also dated 13 January 2011 ('the supplemental agreement'). See pp 1–249, AA1 and pp 250 to 411, AA2.

[10] Clause 3.0 of the supplementary contract (Package 1) stipulates, amongst others, that the supplementary contract is supplemental to the main contract and as such, all terms and conditions contained in the main contract shall continue in full force and effect save as amended by the supplementary agreement. In the event of any discrepancy, the supplementary contract will prevail (AA1/7).

[11] Pursuant to cl 1(iv) of the main contract (Package 2) read together with the Appendix, the Superintending Officer ('SO') for the project is the General Manager, Planning and Development of the defendant company (AA3/420). The SO during the currency of the majority of the project was DW1, that is, from 1 October 2011 until August 2016. Prior to 1 October 2011, the SO for the project was Dato' Ir Abdul Nasir Abdul Razak (WS-DW1/2).

[12] The following consultants were appointed by the defendant for the project (WS-DW1/3):

Consultant	Name/Company
Quantity Surveyor	JBA-NAC JV ('JBA-NAC')
Civil and Structural Engineering	Zaidun-Leeng Sdn Bhd ('Zaidun Leeng')
Mechanical and Electrical Engineering	Zaidun Leeng
Architect	AHS Architects
Interior Design	Anuar Interior (M) Design

[13] Pursuant to cl 1(v) of the main contract, the Superintending Officer's Representative ('SO representative') means any person deputed or authorised from time to time by the SO to perform any or all of the duties of the SO as may

be from time to time notified in writing to the plaintiff by the SO (AA3/420).

[14] By way of letter dated 3 November 2010, the SO at the material time, Dato' Nasir, notified the plaintiff that he had delegated certain duties and responsibilities under the main contract to the various consultants of the project as the SO representatives (AB16/37). In this letter, the SO at the time further stated that any matter in relation to time and cost, in particular cll 24, 30, 44, 47, 48, 51, 52 and 53 of the main contract were subject to the SO's approval.

[15] The original contract price in respect of Package 2 was RM161,967,334.31 as set out in cl 4 of the articles of agreement. See p 418, AA3.

[16] The original contract price in respect of Package 1 was RM18,300,000 as set out in cl 2 of the supplemental agreement. See p 7, AA1.

[17] The contracts in respect of both Package 1 and Package 2 are conventional contracts as opposed to design and build contracts, that is where the design, specifications and bills of quantities are provided by the employer and where the employer remains responsible for the designs involved in the project and the contractor is not responsible for the design of the works unless the contractor proposes alternative design or alteration to the original design.

[18] Extensions of time were granted by the Superintending Officer ('SO') for the Package 2 contract and the plaintiff-contractor practically completed the Package 2 works within the extended completion period.

[19] In respect of Package 1 works which were relatively much smaller contract than the Package 2 work, the SO did not grant extension of time to the plaintiff-contractor for Package 1 works and the Package 1 works were practically completed many months after the expiry of the original contract period.

[20] Very briefly, the plaintiff-contractor claims:

(1) in respect of Package 1 Contract, for:

(a) contract works done but not yet certified or paid,

(b) extensions of time for completion of Package 1 works, and

(2) in respect of Package 2 works, for:

(a) contract works done but not yet certified or paid,

(b) variation works done but not yet paid,

(c) losses and/or expenses or prolongation costs;

(d) acceleration costs.

On the other hand, the defendant-employer denied liability for any of the plaintiff-contractor's claims and the defendant-employer counterclaims for liquidated damages in connection with the plaintiff-contractor's failure to complete Package 1 works within the contract period.

[21] There are many items of claims by the plaintiff-contractor and the total amount of the claims is approximately RM60m for both packages combined, The defendant-employer's counterclaim was for a total liquidated damages amount of RM9,694,000 in Package 1 works.

[22] After a full trial of 14 days and after having considered the oral as well as written evidence of the witnesses and the parties' closing submissions and submissions-in-reply, this court on 15 September 2021 allowed parts of the plaintiff-contractor's claims in the total amount of RM2,036,521.50 in Package 1 works and RM8,642,914.73 in Package 2 works and allowed part of the defendant-employer's counterclaim in the amount of RM750,000 in Package 1 works. An outline summary of this court's findings, decisions and reasons was given in an email which delivered the decision to the parties.

[23] Being dissatisfied with the said decision dated 15 September 2021, both parties have filed notices of appeal against this court's said decision. In each party's notice of appeal, the respective parties have enumerated many items of this court's findings and decisions against which they appeal from. The sum effect of the respective parties' appeals can be crystallised in one short sentence, namely, each appellant party is appealing against this court's findings and decisions on each and every item which this court has decided in a way which is not in favour of the appellant.

BRIEF OUTLINE OF PLEADINGS, FULL TRIAL AND HEADS OF CLAIMS AND COUNTERCLAIMS

[24] The amended pleadings relied on by the parties are as follows:

Pleading	Date	Reference
Re-amended statement of claim (encl 128)	12 July 2019	SOC
Amended defence and counterclaim (encl 129)	31 July 2019	DEF
Amended reply and defence to counterclaim (encl 130)	16 August 2019	REP

[25] The plaintiff's claims and the defendant's counterclaims in the present suit are tabulated below:

Claim/counterclaim	Head of claim	Amount (RM)
Plaintiff's claims	Alleged balance due for works done under the main contract	16,149,977.50
	Alleged balance due for works done under the supplementary contract	2,083,271.50
	Alleged acceleration costs (main contract)	20,076,768.75
	Alleged prolongation costs (main contract)	12,176,474.11
	Alleged interest and financing charges (main and supplementary contract)	15,506,989.93
	Total:	66,834,195.48
Defendant's counterclaims	Liquidated damages for CUB	444,000
	Liquidated damages for ADW	9,250,000
	Total:	9,694,000

This sum has been amended from the pleaded sum of RM2,630,911.50 after taking into account the omission for the contract rate for the original fittings in the sum of RM547,640 (WS-PW1/25).

This sum has been amended from RM432,000 in open court (NOP1/2).

[26] The parties led evidence through the following factual and expert witnesses and their respective written testimonies during trial:

Category	Name	Designation	Document	Document Marking
Plaintiff's witnesses	Kamaludin bin Mohd Noor (PW1)	Plaintiff's managing director and majority shareholder	Witness statement	WS-PW1

	Mohd Fazil bin Ahmad (PW2) (subpoenaed)	Defendant's project manager (project commencement until 31 December 2012)	—	—
Defendant's witnesses	Nor Azlina bt Mohd Isa (DW1)	Superintending Officer (1 October 2011 until March 2018)	Witness statement	WS-DW1
	Md Yaakob bin Md Shariff (DW2)	Consultant Quantity Surveyor	Witness statement	WS-DW2
	Lim Guan Hock (DW3)	Consultant Civil Engineer	Witness statement	WS-DW3
Expert witnesses	Dzulkifli bin Jaafar	Plaintiff's expert	Plaintiff's affidavit dated 15 May 2020 enclosing its expert report dated 13 May 2020.	PER-1
			Plaintiff's affidavit dated 30 June 2020 enclosing its rebuttal expert report dated 30 June 2020	PER-2
	Nicholas Ian Powell	Defendant's expert	Defendant's affidavit dated 1 June 2020 enclosing its expert report dated 17 April 2020	DER-1

			Defendant's affidavit dated 3 July 2020 enclosing its rebuttal expert report dated 30 June 2020	DER-2
	Joint reports		Plaintiff's affidavit dated 22 June 2020 enclosing the joint expert report	JER-1
			Plaintiff's affidavit dated 6 August 2020 enclosing the joint supplemental expert report dated 4 August 2020	JER-2

[27] The witnesses' oral testimonies are recorded by way of the following notes of proceedings:

Notes of Proceeding	Witness	Testimony	Reference
10 August 2020	PW1	Cross-examination	NOP1
11 August 2020		Cross-examination	NOP2
12 August 2020		Cross-examination	NOP3
		Re-examination	
13 August 2020		Re-examination	NOP4
	PW2	Examination-in-chief	
14 August 2020		Examination-in-chief	NOP5
		Cross-examination	
10 September 2020		Cross-examination	NOP6
11 September 2020		Cross-examination	NOP7
		Re-examination	

24 February 2021	DW1	Cross-examination	NOP8+9
25 February 2021			
(Judge's Notes)		Re-examination	
15 April 2021	DW2	Cross-examination	NOP10
16 April 2021		Cross-examination	NOP11
26 April 2021		Cross-examination	NOP12
		Re-examination	
27 April 2021	DW3	Cross-examination	NOP13
		Re-examination	
19 May 2021	Experts	Hot-tubbing	NOP14

[28] With regard to the bundles of documents referred to in the present suit, the parties have agreed, with leave of this court, that the documents can be referred to as AA, AB or ABQ in accordance with their respective reference numbers without the necessity to mark them separately with different exhibit numbers again (NOP/1/1). 'AA' refers to the Agreed Documents Part A (both authenticity and contents agreed), 'AB' refers to Agreed Documents Part B (authenticity agreed but contents disputed) for documents expected to be relevant on liability and quantum issues, while 'ABQ' refers to Agreed Documents Part B for documents expected to be relevant to quantum issues. Before the start of the trial it was also directed with the parties' consent that the witness statement of a witness is taken as read without having to read into the CRT system again when the witness has taken the witness stand to swear upon oath that the contents of the witness statement forms his/her evidence in this case and signs the witness statement in the sight of the court.

[29] The trial of this matter took place over 14 days on the following dates: 10 August 2020, 11 August 2020, 12 August 2020, 13 August 2020, 14 August 2020, 10 September 2020, 11 September 2020, 24 February 2021, 25 February 2021, 15 April 2021, 16 April 2021, 26 April 2021, 27 April 2021 and 19 May 2021.

SUMMARY OF THE COURT'S FINDINGS AND DECISIONS

[30] In order to facilitate a quick understanding of the findings and decisions of this court, the summary of this court's findings and decisions as delivered via email to the parties on 15 September 2021 is reproduced below, with typographical error corrected and with abbreviations 'P' to connote 'the plaintiff') and 'D' to connote 'the defendant':

(1) *Courts' Findings and Decisions on Values of Works Done under Package 1 Contract (Site Office, CUB and ADW)*

	Court's findings on values (RM)	Outline Summary of Findings and/or Reasons
Original Contract Works:		
Contract Preliminaries	300,000.00	Undisputed item, as agreed between the parties.
Bill E1: CUB	5,000,000.00	Court accepts the P's version because D erroneously reduced the quantities of works done in respect of brickwalls, roadworks and second extension piles.
Bill E6: ADW	13,214,961.50	Court accepts P's valuation because D's valuation in draft Final Account has omitted the piling for Pump Outlet s No. 1, No. 2 and No.3 but has not included the replacement raft foundation: DW2 evidence in cross-examination on 16.4.2021. It is to be noted that the materials totalling RM229,600.00 in respect of Pump Outlet No. 4 is to be paid under the item 'Materials for Pump Outlet No. 4'.
Bill E7: Site Office	700,000.00	Undisputed item, as agreed between the parties.
Materials for Pump Outlet No. 4	229,600.00	Court agrees with opinion of DW4 Mr Nicholas Ian Powell (D's expert) that the value of such materials handed over to P should be under 'Materials' and not works done.
Subtotal value of Original Contract Works done and materials delivered	19,444,561.50	
Variations:		
VO1: Temporary sheet piling	255,600.00	Undisputed item, as agreed between the parties.
Pipe fittings	0	Court agrees with DW4 that this item is not a variation. The express clause in the Preamble (AA3/654 item K) prevails over SMM in the event of contradiction or discrepancy. The priced item for drainage pipes was inclusive of pipe fittings.

Supply and install actuator electrical cabling	160,000.00	Court agrees with P that this work was variation and was carried out and completed.
VO2: Change of penstock	24,000.00	Undisputed item, as agreed between the parties.
VO3: Concrete cover slab	10,000.00	Court agrees with DW4 Mr Nicholas Ian Powell (D's expert) that since this item was certified by the CQS in the draft Final Account and has been admitted on behalf of D, it should be included as part of the final values of works done here.
Subtotal for variations	449,600.00	
Change of pipe size (additional value)	254,460.00	Undisputed item, as agreed between the parties.
Total value of works done and materials delivered in Package 1	20,148,621.50	

This Court finds that the total value of works done and materials delivered in Package 1 Contract (Site Office, CUB &, ADW) is *RM20,148,621.50.*

Cumulative total amounts paid by the Defendant to the Plaintiff for works done and materials delivered under Package 1 Contract (Site Office, CUB and ADW) = *RM18,112,100.00*.

Total value of works done and materials delivered in Package 1 — Cumulative total amounts paid by the Defendant to the Plaintiff for works done and materials delivered under Package 1 Contract

= *RM20,148,621.50 - RM18,112,100.00*

= *RM2,036,521.50.*

Therefore, this Court awards *RM2,036,521.50* as the balance amount payable by the Defendant to the Plaintiff for works done and materials delivered under Package 1 Contract (Site Office, CUB and ADW).

(2) *Courts' Findings and Decisions on Values of Works Done under Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge)*

	Court's findings on values (RM)	Outline Summary of Findings and/or Reasons
Original Contract Works in Package 2:		

Contract Preliminaries	5,838,659.80.	Court agrees with P's submission that since the Phase 2 Works (including variations) have been practically completed, the full amount of Contract Preliminaries should be certified and paid.
Bill E1: CUB (Curbside Expansion)	9,800,960.30	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item. Moreover, D's version is based on progress valuations and site measurements (which P has not specifically shown to be erroneous), while P's version is based on assumption that BQ quantities are all 100% accurate.
Bill E2: Main Terminal Extension	8,774,575.88	Court accepts D's evaluation in the CQS's draft Final Account on this item except for the sub-item E2A regarding piling. Court agrees with the P's submission in paras. 89 and 90 of P's Written Submission that CQS erred and/or acted improperly in deducting quantities and values of piling works although they had been measured and evaluated in earlier payments up to Progress Certificate No. 24 and many months after the completion of the piling works. The subtotal value of Bill E2: Main Terminal Extension should be RM8,554,920.68 + improperly deducted value of piling works in Bill E2A. Except for piling works, Court finds the CQS's draft Final Account valuation for this item to be preferred and more accurate. Especially where there are items in which CQS in draft Final Account certified/recommended significantly higher figures than the P's claimed figures including items E1, E4, E5, Baggage In- Line Systems. The improperly-deducted value of E2A piling works is RM RM219,655.20: see item E2A in the table under footnote *1 below. The total value of Bill E2 is RM8,554,920.68 + RM219,655.20 = RM8,774,575.88.

Bill E3: Transfer Corridor Expansion	19,344,819.56	Court accepts D's evaluation in the CQS's draft Final Account on this item except for the sub-item E3A regarding piling. Court agrees with the P's submission in paras. 89 and 90 of P's Written Submission that CQS erred and/or acted improperly in deducting quantities and values of piling works although they had been measured and evaluated in earlier payments up to Progress Certificate No. 24 and many months after the completion of the piling works. The subtotal value of Bill E3: Transfer Corridor Expansion should be RM18,654,089.56 + improperly deducted value of piling works E3A. Except for piling works, Court finds the CQS's draft Final Account valuation for this item to be preferred and more accurate. Especially where there are items in which CQS in draft Final Account certified/recommended significantly higher figures than the P's claimed figures including items E1, E4, E5, Baggage In-Line Systems. The improperly-deducted value of E3A piling works is RM690,730.00: see Bill E3A in table under footnote * 1 below. The total value of Bill E3 is RM18,654,089.56 + RM690,730.00 = RM19,344,819.56.
Bill E4: Existing Main Terminal Building	23,788,584.06	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.
Bill E5:Interior Decoration Works	11,384,968.42	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.

Bill E6: External Works	8,526,673.20	Progress Certificate values for this item: Certificate No. 24 Bill E6: RM6,506,309.40 [remeasurement summary Encl. 77 pg 464]; Certificate No. 25 Bill E6: RM7,759,283.50 [remeasurement summary Encl. 78 pg 120]; Certificate No. 26 Bill E6: RM8,526,673.20 [summary Encl. 79 pg. 254]. Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. P's witnesses have not given specific evidence to show which specific items of the Bill No. E6A to E6J of CQS' valuation No. 26 of draft Final Account is erroneous.
Addendum to external works	Included in Bill E6 (External Works)	In P's Progress Claim No. 24, P's claim figure for Bill E6 (External Works) was a total of RM7,252,790.00 ABQ44/450]. Court agrees with D that P's claim for Addendum to External Works has been included in CQS's total valuation of Bill E6 at RM8,526,673.20 in Certificate No. 26 and in draft Final Account.
Mechanical Works	24,636,338.19	Undisputed item, as agreed between the parties.
Electrical Works	20,634,482.89	Undisputed item, as agreed between the parties.
Baggage In-Line Systems	16,180,000.00	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.
Profit & Attendance on NSCs' works	275,267.88	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.
Subtotal for Original Contract Works in Package 2	149,185,330.18	

Nominated Sub-Contractors (NSCs):		
Lift & Escalator Works	3,609,904.95	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.
ID Customised Joinery	4,818,387.92	Undisputed item, as agreed between the parties.
Internal Signage	1,518,450.00	Undisputed item, as agreed between the parties.
Passenger Boarding Bridge Works	4,780,046.00	Court agrees with D's draft Final Account evaluation which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. D's figure for this item is also higher than P's claimed figure for this item.
Subtotal for NSCs	14,726,788.87	
VOs Agreed:		
Recommendation of Progress Claim No. 26, as per column CQS Recommendation; 181 nos. of VOs evaluated out of 191 nos. claimed	12,504,295.68	P's evidence is that of a much bigger total amount of 191 VOs claimed in the building works, the Consultants recognised 176 items as variations and the CQS confirmed and recommended 176 VOs with a total value of RM12,504,295.68. D's evidence is that CQS only confirmed and recommended RM11,082,357.31. Court accepts P's evidence as more probable and assesses this Agreed VOs at a total value of RM12,504,295.68. See footnote *2 below.
VOs submitted before practical completion of the Works:		
Sheet piles (cofferdams)	3,000,000.00	Court accepts P's evidence and submission that the sheet piles (cofferdams) for deeper excavation of 10.5m and for construction of revised pilecaps were variations. See outline summary of reasons in footnote *3 below.

Movement of piling machine	0	This Court agrees with D's submission that movement of piling machine did not constitute a variation work.
Bending H-beams	0	This Court agrees with D's submission that bending of H-beams, whether done at the steel card before delivery to site or done at the site after delivery, did not constitute a variation work.
Other VOs recognised but not yet evaluated (balance 34 items)	Included in 'VOs Agreed'	This overlaps with the items in the abovementioned 'VOs Agreed'.
Subtotal for VOs submitted before practical completion	15,504,295.68	
Additional VOs submitted after draft Final Account:		
Temporary conveyor	316,600.00	Undisputed item, as agreed between the parties. Temporary conveyor was in fact provided at D's instruction and installed according to D's requirements.
Approach ramp	1,200,000.00	Court accepts P's evidence and P's submission that the changes in the approach ramp constituted variation works and that these have not been measured or included in the other items of works. The amount of RM1,200,000 quoted in the contemporaneous documents and not disputed or counter-quantified by D in the course of the works should be accepted as the reasonable value for this item.
Cement screed	0	Court agrees with D's submission that cement screed did not constitute a variation work.

Aluminium glass frame	318,600.00	Court agrees with P's submission and evidence that more individual panels supplied and installed to make up the much larger composite panels involved more individual components of sub-frames, mullions, transoms, brackets, bedding frames and other fixing accessories for the individual panels which make up the composite panel and also more labour input in the installation of component panels. Court accepts P's submission that RM330/m2, the higher of the 2 priced BQ rates, should be used for the revised aluminium glass panels instead of RM230/m2.
Repairing & upgrading work at Jalan Garuda	198,000.00	Court accepts P's submission and evidence by the time the third party contractor was appointed, P had done part of the repair & upgrading works at Jalan Garuda up to 20% thereof. However, as there was no formal award of this extra work, this is no valid basis to claim for loss of profit in respect of balance of Jalan Garuda works.
Subtotal of Additional VOs submitted after draft Final Account:	2,033,200,00	
GRAND TOTAL OF VALUE OF WORKS DONE IN PACKAGE 2	181,449,614.73	

Footnotes:

Footnote *1 Piling Works in Package 2 (main contract)

Bill E2A: Piling for Main Terminal Extension	Piling works using the RC square piles were valued in Progress Certificates Nos. 1 to 17 based on the original contract rates and quantities as agreed by the parties and consultants. Court accepts P's evidence that the CQS acted erroneously and/or incorrectly in reducing the values and rates of piling works from Progress Certificate No. 18 onwards and in the draft Final Account. Court also accepts P's evidence that the reduced quantities used by the CQS in PC No. 18 onwards were under-estimation, under-valuation and were also not supported by site records. The improperly-deducted value of Bill E2A piling is Certificate No. 17 total amount and Progress Claim No. 24 amount of Bill E2A [AB13/10, ABQ44/349] minus draft Final Account valuation for Bill E2A [AB14/34], ie. RM1,366,567.00 - RM1,146,911.80 = RM219,655.20.
Bill E3: Transfer Corridor Expansion	Same findings as per Bill E2A. The improperly-deducted value of Bill E3A piling is Certificate No. 17 total amount and Progress Claim No. 24 amount of Bill E3A [AB13/34, ABQ44/363] minus draft Final Account valuation for Bill E3A [AB14/55], ie. RM2,244,418.00 - RM1,553,688.00 = RM690,730.00.

Footnote *2

Certificate	Particulars	Encl & page
Progress Certificate No. 25 (Penultimate Certificate) dated 30.12.2014	Signed and stamped by CQS. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39	Encl. 78 Pg 1
	Lists of Variation Orders, with summary at pg. 130, showing totals of P's submissions of Dec 2014 as RM19,410,054.56, CQS Recommendation as RM12,504,295.68, % Paid as 85.12% and Amount Recommended as RM10,643,809.66.	Encl. 78 pg 122–130

Progress Certificate No. 26 (Penultimate Certificate No. 2)	Not signed by CQS or Architect. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39 Lists of Variation Orders, with summary at pg. 263, showing totals of P's submissions of Dec 2014 as RM19,410,054.56, CQS Recommendation as RM12,504,295.68, % Paid as 85.12% and Amount Recommended as RM10,643,809.66.	Encl. 78 pg. 131 Encl. 79 pg. 255–263
Progress Certificate No. 27 (Penultimate Certificate No. 3) dated 22.01.2016	Signed and stamped by CQS and Architect. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39	Encl. 79 pg. 265

Footnote *3 (Sheet piles (cofferdams) as variations:

The *original* depth of pilecaps and excavation for pile caps was only 3m. At the site, the depth of many of the pile caps excavation was increased to 10.5m, a very substantial increase in depth for soil excavation. This Court finds that in the execution of pilecap excavation and pilecap construction, P installed the interlocking sheet piles which are coupled and locked with steel beams and bracings all surround the pilecap pits, and the resulting protection works were similar or akin to cofferdams [see, for example, photographs in Encl. 124 pages 28–29]. This Court finds that the cofferdams/interlocking sheet piles served the dual purposes of (i) protect the existing adjacent building from damage in the course of the pilecap construction works with deep excavation of 10.5m (or approx. 40 feet)(as stated by P's Project Manager in AB5/18 and commented by CQS in AB5/20) and (ii) to hold back the soft ground surrounding the pilecaps in order to enable the construction of pilecaps)as stated by PW2 Fazil in AB5/19). Having considered the terms of contract, SMM and the parties' submissions, this Court agrees with P that sheet piles/cofferdams at the Package 2 pilecap construction constituted a variation. The Plaintiff's summary of quantities in AB5/7 is not corroborated by specific documents. The Court prefers the quantity as reported by the Consultant C&S Engineer ZL in their letter dated 6.4.2015 backed with photographs and piling layout [AB15/620–631], only about 60% of the Zone 2 of 42 pilecaps (which were

bigger and deeper pilecaps) were constructed with sheet piles/cofferdams. The rate of RM450/m2 claimed by P was based on the rate of sheet piles approved and certified in Package 1 works, and the Defendant has not testified as to a different rate. Taking into account that DW3 has confirmed that at least the deeper excavation should be at higher rate (increasing excavation value to RM652,395 which has not been included in the draft Final Account), that at the time of the project the Plaintiff quoted RM3,000,000 for such variation works, and that RM4,571,640 is excessive by reason of excessive quantity used, this Court finds that a reasonable amount of this variation is RM3,000,000.

Summing-up for Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge):

This Court finds that the total value of works done and materials delivered in Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) is *RM181,449,614.73*.

Cumulative total amounts paid by the Defendant to the Plaintiff for works done and materials delivered under Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) = *RM172,806,700.00*.

Total value of works done and materials delivered in Package 2 - Cumulative total amounts paid by the Defendant to the Plaintiff for works done and materials delivered under Package 2 Contract

= *RM181,449,614.73 - RM172,806,700.00*

= *RM8,642,914.73*.

Therefore, this Court awards *RM8,642,914.73* as the balance amount payable by the Defendant to the Plaintiff for works done and materials delivered under Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge).

Plaintiff's Acceleration Claims in Package 2 (Terminal Building, Transfer Corridor, Passenger Boarding Bridge)

The legal bases for acceleration claims under the laws of Malaysia are either:

(1) Breach of contract and foreseeable loss caused thereby under s 74 the Contracts Act; or

(2) Instruction by S.O. or SOR resulting in loss/expense pursuant to loss/expense clause of the contract.

Here, neither of the legal bases has been established.

On the facts, sequencing of works and partial possession and partial occupation was part and parcel of original contract which required works to be planned, phased, executed and carried out in stages and parts so as not to close the airport and so as to ensure the airport remains a live and operational airport throughout the construction period, ie. a live airport environment throughout the course of the construction works. This Court accepts the Defendant's evidence and submission that no acceleration of works in Package 2 has been proved here. This Court finds and holds that the Plaintiff is not entitled to claim for any alleged acceleration of works in Package 2.

Moreover, Plaintiff's purported global and over-generalised method of using a global and rough % to compute the quantum of alleged accelerated costs is improper or erroneous in principle and contrary to the law which requires causal link to be proved between the loss and the breach/instruction. In purporting to use a rough and global % to compute alleged loss due to alleged acceleration, the Plaintiff has failed to established causal link between the alleged loss and the alleged breach/instruction and has also failed to prove the quantum of alleged special damages according to the settled principles of law.

This Court agrees with the Defendant's submission and evidence that the Plaintiff has not proved there was an acceleration of works which entitled the Plaintiff to claim for losses or additional costs, and that the Plaintiff has also failed to prove the alleged special damages and/or costs of the alleged acceleration.

On the ground of liability as well as quantum, the Plaintiff's acceleration claims are dismissed.

Plaintiff's claim for prolongation costs

Prolongation costs in substance and effect is a type of loss and/or expense claim. This Court agrees with the Defendant's submission that that the Plaintiff is not entitled to claim for the prolongation costs as it has failed to meet the mandatory pre-conditions set out under clauses 43 and/or 44 the main contract. This Court is bound by the principles decided by the Court of Appeal in the case of *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd* [2016] 4 MLJ 570 ('Perbadanan Menteri Besar Kelantan'), which also involved a contract based a PWD 203A Standard Form Contract (1983 Edition).

Further or alternatively, this Court finds that the Plaintiff has failed to prove the quantum of its prolongation costs and has not proved the causal link between the head of prolongation cost/loss and the delay event. As such, on quantum basis the Plaintiff is also not entitled to the claims for prolongation costs.

Finance charges and/or interest

A claim for finance charges is a claim for special damages and has to be proved specifically by documentary evidence on the actual expenses of financing incurred due to the delay in payment. In order to claim finance charges as special damages, a plaintiff has to prove documents on bank loans and/or financing facilities taken by the plaintiff, the actual amounts of financing charges paid or payable to the banks and/or lenders during the relevant period of time. In the present case, the Plaintiff has not adduced specific proof of any bank loan or credit facilities or the actual amount paid or payable to the banks As such, there is no valid basis to consider or award special damages in the form of finance charges.

On the other hand, pre-judgment interests on the judgment sum may be awarded as interest in the usual way by the Court in exercise of the Court's discretion. In the circumstances of the present case and bearing in mind the commercial nature of the building contract, this Court finds that the usual pre-judgment interest at simple interest rate of 5%pa should be awarded on the judgment sum which represent the unpaid values of works done and materials delivered. This court also finds that as the unpaid values of works done and materials delivered were essentially items and

values which should have been certified and included in the Final Account and the Final Certificate and the gross valuations in this suit have included the retention monies which are due for release upon the expiry of the Defects Liability Period, the pre-judgment interest should start on the date of expiry of the Defects Liability Period.

In respect of the judgment sum of Package 1 Works (Site Office, CUB and ADW), the CUB was certified as practically completed and taken into possession by the Defendant on 11th October 2011 and the Site Office was completed and taken over earlier than 11th October 2011. ADW was certified as practically completed on 14.7.2014. In exercise of discretion, this Court awards the simple interest of 5%pa on the judgment sum for Package 1 Works to start from 14.7.2016 until the date of full realisation.

The Package 2 Works (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) were certified as practically completed and taken over progressively in multiple zones, with the latest being 27.6.2013. In exercise of discretion, this Court awards the simple interest of 5%pa on the judgment sum for Package 2 Works to start from 27.6.2015 until the date of full realisation.

Defendant's counterclaim for LAD in respect of CUB Works in Package 1

As regards the Defendant's claim for Liquidated & Ascertained Damages (LAD) in respect of non-completion of the CUB works from 29.7.2011 to the CPC date and in the amount of RM444,000.00, this Court accepts the Defendant's evidence that the balance CUB works could not be completed by the Plaintiff by 29.7.2011 due to other independent contractor's non-completion of their works outside the Plaintiff's scope of contract. These other independent contractors were Letrik PJ Union and Sunway Engineering Sdn Bhd. In Letrik PJ Union's letter dated 25.7.2011, Letrik PJ Union stated the equipment for the CUB (outside the Plaintiff's scope of works) would only be delivered in September 2011 and due to its large size the equipment had to be brought into CUB through the roof. Sunway Engineering Sdn Bhd (Mechanical Works) noted in its letter dated 9 September 2011, chiller plant equipment it was required to install was also huge and had to be installed through an opening in the wall. In the project, the S.O. issued the CPC certifying CUB works as practically completed on 11th October 2011. In the entire circumstances, this Court finds that the Plaintiff was entitled to further extension of time for the completion of works in CUB until 11th October 2011. In the premises, there is no valid basis for the Defendant to issue CNC or claim LAD in respect of the CUB works. As such, the Defendant's counterclaim for CUB in respect of CUB is dismissed.

Defendant's counterclaim for LAD in respect of ADW Works in Package 1

In this suit the Defendant has claimed for Liquidated & Ascertained Damages (LAD) in respect of non-completion of the ADW works from 31.12.2011 to the CPC date (14.7.2014) and in the amount of RM9,250,000.00.

In respect of ADW works, this Court finds as follows:

(1) The original date for completion of ADW was 31.12.2011;

(2) There was no extension whatsoever granted by the S.O. in respect of ADW works;

(3) The original contract design of the foundation for pump sumps was done without the benefit of any borehole test or Mackintosh probe result for the pump sump location;

(4) 24m piles were originally designed for the pump sumps, but hard layer encountered at about 7m deep after Mckintosh probe;

(5) As early as March 2011, the Plaintiff highlighted design-related and safety problems and asked for design review, design details and solutions;

(6) The Plaintiff was justified in highlighting design-related and safety problems and asking for design review, design details and solutions because (a) the pump sumps were located very close to the airport runway for aircrafts; (b) the hard layer encountered in the Mackintosh probe was unforeseen or unexpected; (c) the presence of the hard layer at 7m depth level at the pump sump which required 24m length of piles would pose design-related problems; (d) if the original design of square piles was to be used for foundation of pump sump, piling rig and other related sizeable machinery would have to be used at the side of the runway, and the height of piling rig would pose danger to aircrafts [see photographs in Encl. 124 pages 8 to 15 for the sizes and heights of piling rig, A-frame and crawler crane for use in diving piles); (e) the safety concern warranted specific instructions from the S.O.

(7) From March 2011–early Dec 2011, the consultant engineer ZL did not issue any written letter or response.

(8) Neither has the S.O. issued any specific instructions or suggest any practical and workable solution.

(9) After waiting for months without any specific response from the Defendant or the S.O. or the consultant engineer ZL, in mid-2012 the Plaintiff-contractor proposed a design-related solution and an alternative design of using raft foundation design instead of square pile foundation for the pump sump, and this alternative design proposal would obviate the necessity of using any piling rig, A-frame or crawler crane;

(10) The Plaintiff's alternative design for raft foundation for the pump sump was accepted and approved by the S.O. and/or ZL;

(11) Upon obtaining the approval for the alternative raft foundation, the Plaintiff proceeded with the construction of the pump sum;

(12) By July 2013, the pump sump RC structures had been completed and the pumps installed and was functioning, except for test and commissioning;

(13) Testing and commissioning of the pumps was delayed until January 2014 due to delay in power supply;

(14) Power supply works were under Letrik PJ Union, a different contractor of the Defendant;

(15) After January 2014, there was additional works on concrete covers which the M&E Consultant by letter dated 25.02.2014 instructed on behalf of the S.O. to cover all the drainage areas of all pump sumps;

(16) The additional works on concrete covers were completed on 30 April 2014;

(17) The revised works of ADW (including the additional works on concrete covers) were substantially completed on 30 April 2014 except for some smaller balance items.

(18) Apart from the above, there were also additional works in the ADW which caused delay to the completion of the ADW works, such as sheet piles/cofferdams;

(19) However, the Plaintiff did not promptly complete the smaller balance items ADW works, thereby delaying the inspection for handover of the DW works; and

(20) Eventually, the completed ADW works were hand over by the Plaintiff to the Defendant and certified by the S.O. as practically completed on 14 July 2014.

In the circumstances, this Court finds that the Plaintiff's works at the ADW (including testing and commissioning of pumps and the additional works on concrete covers) was physically completed on 30 April 2014.

This Court also finds that the Plaintiff was entitled to extension of time for ADW works until 30 April 2014.

Even if the Plaintiff were not entitled to extension of time due to any technical or procedural reason, the Defendant is still not entitled to impose or recover any LAD against the Plaintiff in respect of the period until 30 April 2014 for ADW works. This is because by the Defendant's acts, neglect, default and/or breaches including those summarised in items (1) to (19) above the Defendant contributed to or at least jointly caused the delay in the completion of the ADW works. Under the principle of law that a party cannot benefit from his own wrong, the Defendant who contributed or jointly caused the delay cannot benefit from the delay by claiming LAD from the opposite party, the Plaintiff here. *Pembinaan Limbongan Setia Sdn Bhd v, Josu Engineering & Construction Sdn Bhd* [2010] MLJU 192 and other decided authorities have established such principle that a party cannot benefit from or take advantage of its own wrong or default.

By way of DW3's letter dated 19.6.2014 to the Plaintiff, he informed that the inspection on 18.6.2014 had been aborted due to the outstanding works which had yet to be completed [AB16/204]. As the balance items of ADW works were not completed promptly resulting in further delay until July 2014 before the CPC inspection was carried out and the S.O certified CPC as achieved on 14 July 2014, the Plaintiff-contractor was not entitled to further extension of time beyond 30.4.2014 for the practical completion of ADW works.

In the circumstances, this Court finds and holds that the Defendant is not entitled to impose any LAD in respect of ADW works for any period up to 30.4.2014, but

the Defendant is entitled to LAD in respect of ADW works for the period from 1 May 2014 to 14 July 2014. Under the Package 1 (Site Office, CUB and ADW), the LAD rate for ADW is RM10,000 per day. The Defendant has not produced evidence to show this rate of RM10,000 was exorbitant or unreasonable. Hence, the total LAD which the Defendant is entitled to impose against the Plaintiff in respect of ADW works was: RM10,000 per day X 75 days = *RM750,000*.

After set-off against the balance value of works payable in respect of Package 1 Contract (Site Office, CUB and ADW), the judgment sum for Package 1 Contract (Site Office, CUB and ADW) is *RM2,036,521.50 – RM750,000 = RM1,286,521.50.*

Summing-up and orders:

In conclusion, this Court hereby orders as follows:

(1) In respect of Package 1 Contract (Site Office, CUB and ADW), the Defendant shall pay the Plaintiff the sum of *RM1,286,521.50* together with simple interest thereon from 14.7.2016 until the date of full realisation;

(2) In respect of Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge), the Defendant shall pay the Plaintiff the sum of *RM8,642,914.73* together with simple interest thereon from 27.6.2015 until the date of full realisation; and

(3) The parties are to address this Court on costs of action and quantum of such costs by filing and exchange their outline submissions within 7 days from to-date. The matter is fixed for *29th October 2021 at 2.30 p.m.* via email for the Court to deliver its decision on the costs of action and quantum thereof.

[31] For convenience and ease of understanding, this court will further elaborate on the findings, decisions and reasons according to the groups or categories of heads of claims and counterclaims stated below:

(a) values of original contract works;

(b) variations;

(c) delays, extension of time and liquidated damages;

(d) loss and/or expense claims or prolongation claims;

(e) acceleration claims;

(f) financing costs; and

(g) interests.

A VALUES OF ORIGINAL CONTRACT WORKS IN PACKAGE 1 CONTRACT (SITE OFFICE, CUB AND ADW)

[32] In respect of the values of the original contract works in the Package 1 contract, the parties' respective amounts summarised in their Experts' Joint Reports ('JER2') are as tabulated below:

Bill No and Description	Plaintiff's figure	Defendant's figure
Contract Preliminaries	300,000.00	300,000.00
Bill E1: CUB	5,000,000.00	4,377,077.86
Bill E6: ADW	13,214,961.50	12,943,885.80
Bill E7: Site Office	700,000.00	700,000.00
Materials supplied		229,600.00
Sub-Total	19,214,961.50	18,550,563.66

[33] Accordingly, it can be seen from the table in the immediately foregoing paragraph that the main areas in dispute between the parties are the CUB works (Bill E.1) and ADW works (Bill E.6). The Preliminaries and Site Office works are not in dispute between the parties in the present suit.

Central Utilities Building (CUB)

[34] In respect of the CUB works, the original amount provided in the contract was RM5m. The plaintiff has claimed the said sum of RM5m whereas the defendant has purportedly re-measured the works in respect of the CUB and had valued such works at RM4,377,077.86, thereby deducting a sum of RM622,922.14.

[35] The plaintiff submits that while the BQ in respect of the CUB was ostensibly stated to be provisional and subject to re-measurement, in effect, the cost for constructing the CUB operated on a lump sum basis, much in the same way that cost of the site office works was provided for. In support of this submission, the plaintiff has relied on, inter alia, the following arguments:

(a) the CUB is a built-for-purpose building, which was built exactly in accordance with the drawings and specifications as set out in the contract, except for a change in the type of piles used from spun concrete piles to RC piles due to the unavailability of spun concrete piles at that time. As in the case of the site office (which was awarded on a lump sum basis), the CUB quantities were not in fact provisional, despite being stated as such, where the defendant's particular QS consultant that prepared the BQ for the CUB would have been given the complete set of drawings and designs when preparing the tender BQ. *See Q&A 61 WS PW1, see also encl 151 parag 80, plaintiff's Expert Report No 2 dated 30 June 2020 ('PER-2')*;

(b) the plaintiff's position that the CUB was built exactly to specifications (except for piling) is supported by the fact that no new drawings were issued by the defendant after the initial tender or construction drawings were issued, which differed from the original tender or construction drawings, which leads to the inescapable conclusion that the CUB was constructed based on the very same tender and construction drawings. While DW2 indicated that he was unsure if no new drawings were issued, the defendant did not produce any such new drawings at trial, and on the balance of probabilities, it is submitted that the plaintiff's version of events, that no new drawings were issued and that the CUB was constructed exactly in accordance with the drawings and specifications as set out in the contract except for the change in piling, should be accepted. *See Notes of Evidence 16 April 2021, p 26 lines 31–34*;

(c) the CUB was built on the exact location as depicted in the drawings and the associated external works were also built according to the tender drawings and designs. While DW2 hypothesized that the defendant might have saved on some external works in that some areas of road could have been salvaged, no evidence of such savings was produced at trial. *See Notes of Evidence 16 April 2021, page 30, see generally: Notes of Evidence 16 April 2021, pp 26–32.* The plaintiff contends that the quantity of roadworks built is approximately 2,456 m2 and not 906 m2 as purportedly re-measured by the defendant. The defendant's action in purposely attributing lower values to the works carried out has resulted in a lowering of cost of RM167,000 just for the roadworks element. Despite seeking to assure this honourable court that such re-measurement was undertaken, the fact that DW2 was unable to explain why the quantity of roadworks dropped from 2,456m2 to only 906m2, without reference to any documents, supports the plaintiff's submission that no re-measurement was undertaken by JBA in unilaterally arriving at a draft Final Account for Package 1. PW1 has instead given clear evidence of why the claimed quantities for the CUB roadworks must be correct. *See: Notes of Evidence 13 August 2020, p 36*;

(d) similarly, in the case of brick walling for the CUB, the BQ provides for the construction of 2,568 m2 of one brick walls and no quantity of 1/2 brick walls. This is understandable, as the CUB housed TNB equipment which required that the bulk of the walls have a rating of one brick. *See: AB15 p 518, Items D and E.* However, for reasons only known to JBA, the quantities of 1-brick walls were arbitrarily reduced from 2,568 m2 to only 804 m2 and the quantities of 1/2 brick walls were arbitrarily increased from zero to 2,051 m2, again, causing an arbitrary drop in the cost of the works. *See: AB15 p 518, Items D and E*; and

(e) another illustration to show that JBA did not engage in any re-measurement exercise as alleged in the course of creating the draft final Account is the discrepancy in piling details. The original BQ for the CUB provides for 240 initial spun concrete piles of 12 meters, with one extension of 12 meters and a second extension of 6 meters. *See: AB15 p 509, Items E–G*. In the draft final account, however, the quantities for the second extension have dropped drastically from Nos 120 to 18. *See: AB15 p 510, Items Q–S*. When asked about this discrepancy in cross-examination, DW2 asserted that the discrepancy was based on re-measurement with reference to piling records, but was unable to provide the piling records upon which the alleged re-measurement by JBA took place. *See Notes of Evidence 16 April 2021, pp 34–35*.

[36] On the other hand, it is the defendant's position that the quantities of the CUB works are provisional and are not final. In this regard, the defendant reiterates Part D.1.1 above which set out, in essence, that where the bills of quantities provide that the quantities are 'provisional', the same is subject to remeasurement and is not final. In the supplementary contract, the CUB works (Bill E.1) consists of: (a) prestressed spun concrete pile (Bill E.1.A) (AA1/26); (b) building works (Bill E.1.B) (AA1/33); and (c) external works (Bill E.1.C) (AA1/69). The supplementary contract expressly stipulates that all three components of the CUB works are 'provisional'.

[37] The defendant submits that the plaintiff carried out less quantities of works in the CUB than were shown on the drawings and stated in the bills of quantities. In support of this submission the defendants relies, inter alia, on the following contentions:

(a) the plaintiff relies on the tender drawing which allegedly illustrates the dimensions of the CUB and the alleged surrounding roadworks carried out by the plaintiff. The plaintiff's counsel also suggested this to the DW2, who clarified that whilst arithmetically, the quantities for the roadworks amount to approximately 4,546m2, this was an existing area prior to the construction of the CUB which led to a lesser valuation for this item of work (NOP/11/29);

(b) in fact, the valuation of the roadworks amounted to significantly less than what the plaintiff has claimed for three reasons, namely: (i) at the tender stage of the project, there was a parking area located near the CUB site which was not included in the final measurement on site; (ii) the entrance area of the CUB has been reduced as it was not constructed as in the drawings; and (iii) the road behind the CUB was not constructed as in the drawings as there was an existing road which could be used instead;

(c) with regard to the plaintiff's contention that there is an alleged arrangement between the parties that the spun piles would be replaced with RC piles, the defendant reiterates Part D.1.5 above. The plaintiff's basis of relying on this alleged arrangement is so that it can claim for a higher amount compared to the works constructed on site. This is untenable. The plaintiff has not been able to show any shred of evidence that the defendant had agreed to pay for spun piles which are more expensive although the plaintiff had constructed RC piles due to unavailability of spun piles; and

(d) in the absence of any evidence that the defendant had agreed to pay for a higher cost in return for a cheaper product, ie RC piles, the plaintiff's contention that it is entitled to claim for the bill of quantities amount and value in relation to piles and CUB works is without basis.

[38] After having considered the evidence of the witnesses including the expert witnesses and the documentary evidence, this court finds as follows:

(a) there was no joint final measurement carried out by the parties in respect of the works done at CUB;

(b) as each party has taken the uncompromising position of arguing that its own approach of valuation is correct and the other party's approach of valuation is entirely erroneous and neither party has computed and assessed the alternative position of re-assessing the quantities and values according to the other party's approach of valuation, this court is left with the decision of having to choose, as between the parties' approaches of valuation, which approach has resulted in a relatively more accurate assessment of the values of the contract works done in CUB under the Package 1 contract; and

(c) this court accepts the plaintiff's valuation because the defendant erroneously reduced the quantities of works done in respect of brickwalls, roadworks and second extension piles. The findings and reasons for the factual conclusion that the defendant erroneously reduced the quantities of works done in respect of brickwalls, roadworks and second extension piles are elaborated in the following paragraphs.

[39] The contract drawings for Package 1 Works show the CUB brickwalls to be full brick thickness. There was no amendment to the CUB drawings. No instruction or document has been produced to show there was any change or reduction in the thickness of the brickwalls at the CUB. In the course of the progress certificates up to progress certificate No 10 in Package 1 Works, the CUB brickwalls were certified and paid as full brick thickness. The certificate of practical completion was also issued by the SO which certified that the CUB works were practically completed with no indication of any error or

A non-compliance with the contractually-stipulated thickness for the CUB walls. It was only after the CUB building had been practically completed and the possession handed over to the defendant that the SO issued progress certificate No 11 in Package 1 Works which purported to value the CUB brickwalls as of half-brick thickness.

B

[40] In the present case, there is no photograph produced by the defendant to show the as-built thickness of the CUB brickwalls, although the CUB building had been in the possession of the defendant since years ago. If the contractor had constructed the CUB brickwalls with half-brick thickness instead of the contractually-stipulated full brick thickness as alleged by the defendant-employer, it would be very easy for the defendant, who has been in control and possession of the CUB buildings since years ago, to take some photographs with measurement tape to show the actual thickness of the as-built brickwalls. However, not a single such photograph has been produced by the defendant in the present case.

C

D

[41] The plaintiff's witness PW1 has testified that the CUB brickwalls were built according to the drawings and are of full-brick thickness. PW1 also testified that the CUB building houses the air-conditioning chillers and other mechanical and electrical equipment and installations and by statutory regulations the CUB brickwalls had to be built with full-brick thickness for safety reasons. This court accepts this evidence as cogent and reliable.

E

F **[42]** In the circumstances this court finds on a balance of probabilities that the CUB brickwalls were of full-brick thickness as claimed by the plaintiff. As such, there is no valid ground for the SO to purportedly reduce the value of the CUB brickwalls to half-brick thickness in the progress certificate No 11 in Package 1 works.

G

[43] As regards the roadworks surrounding the CUB building, the progress certificates prior to progress certificate No 11 valued the CUB roadworks at a quantity of 2,456m2 but in progress certificate No 11 the defendant reduced this quantity of CUB roadwork to only 906m2. The defendant has not

H produced any plan or drawing to show the extent of CUB roadwork valued in the earlier progress certificates and the extent of CUB roadwork valued in progress certificate No 11. The finished surface of the premix on the roadwork would show the contrast in colour tones of the premix surfaces which were laid before the plaintiff's construction of the CUB building and the newly-laid

I premix surface laid by the plaintiff in the course of the CUB roadworks. In order to justify and substantiate a reduction of CUB roadwork quantity from the previously certified 2,456m2 to only 906m2, the defendant ought to have produced contemporaneous colour photographs of the as-built CUB roadworks as well as a drawing to show and mark out the roadworks together

with the dimensions and computation of the areas affected. However, the defendant has not produced any photograph to show the finished surface of the roadworks or any drawing to justify or substantiate the reduction in quantity of CUB roadwork. What happened in our present case is that by a stroke of the pen through the issuance of progress certificate No 11, the defendant has attributed lower values to the works carried out and certified previously and thereby has resulted in a lowering of cost of RM167,000 just for the CUB roadworks element.

[44] The original BQ for the CUB provides for 240 initial spun concrete piles of 12m, with 1 extension of 12m and a second extension of 6m: see *AB15 p 509, Items E–G*. In the draft final account, however, the quantities for the second extension have dropped drastically from 120 Nos to 18. *See AB15 p 510, Items Q–S*. When asked about this discrepancy in cross-examination, DW2 asserted that the discrepancy was based on re-measurement with reference to piling records, but was unable to provide the piling records upon which the alleged re-measurement by JBA took place. *See Notes of Evidence 16 April 2021, pp 34-35*. This item also shows the lack of satisfactory basis and record on the part of the defendant in reducing the quantities and valuation of several items of works in the defendant's draft final account in Package 1 works.

[45] In the entire circumstances of the present case, this court finds on a balance of probabilities that the plaintiff's value of RM5m is relatively more accurate valuation of the original contract works in CUB than the defendant's value of RM4,377,077.86. In the circumstances, this court accepts the plaintiff's figure of RM5m at the total value of the original contract works done at the CUB.

Airside drainage works (ADW)

[46] In respect of the original contract works for airside drainage works (ADW), the plaintiff's valuation is RM13,214,961.50 inclusive of the materials on site of RM229,600, while the defendant's valuation is RM12,943,885.80 exclusive of the materials on site of RM229,600, it being the opinion of the defendant's expert witness that the materials on site of RM229,600 should be placed under a separate item.

[47] In the defendant's valuation in draft final account, the defendant has omitted the piling for pump outlets No 1, No 2 and No 3 but has not included the replacement raft foundation: DW2 evidence in cross-examination on 16 April 2021. At the project site, the original piling works for pump outlets No 1, No 2 and No 3 were omitted and in place thereof, the plaintiff-contractor's alternative foundation design of raft foundation was constructed as the foundation for pump outlets No 1, No 2 and No 3. In the circumstances, the

defendant in its draft final account for the ADW works has overlooked the need to include the value of the raft foundation after having omitted the value of the original piling for pump outlets No 1, No 2 and No 3.

[48] This court finds that due to the defendant's oversight in connection with the non-inclusion of the value of the raft foundation for pump outlets No 1, No 2 and No 3 the plaintiff's valuation of RM13,214,961.50 should be accepted as the value of the ADW works.

[49] It is undisputed that the materials for pump outlet No 4 (ie the pump and the accessories) were in fact supplied by the plaintiff to the defendant and that the value of these materials is RM229,600.

[50] This court agrees with opinion of DW4 Mr Nicholas Ian Powell (defendant's expert) that the value of such materials handed over to the defendant should be under 'Materials' and not under works done.

[51] In the premises, this court accepts the plaintiff's figure of RM13,214,961.50 as the total value of the original contract works done at ADW.

Summing-up for value of original contract works in Package 1 (site office, CUB and ADW)

[52] In conclusion, this court finds that the total value of the original contract works done in Package 1 contract is *RM19,444,561.50*, as tabulated below:

	Court's findings on values (RM)
Original Contract Works:	
Contract Preliminaries	300,000
Bill E1: CUB	5,000,000
Bill E6: ADW	13,214,961.50
Bill E7: Site Office	700,000
Materials for Pump Outlet No. 4	229,600
Subtotal value of Original Contract Works done and materials delivered	19,444,561.50

VARIATIONS IN PACKAGE 1 WORKS (SITE OFFICE, CUB AND ADW)

[53] The parties' respective positions and valuations in respect of the plaintiff's variation claims are as summarised below:

Variations:	Plaintiff's claim	Defendant's position
VO1: Temporary sheet piling	255,600	255,600
Pipe fittings	286,350	0
Supply and install actuator electrical cabling	160,000	0
VO2: Change of penstock	24,000	24,000
VO3: Concrete cover slab	–	10,000
Change of pipe size (additional value)	254,460	254,460

Pipe fittings

[54] As regards pipe fittings, cl 22.1 of the contract stipulates, amongst others, that the rates for the various item for drains, subsoil drains, rubble level channels, open box channels, pipe culverts and water pipe lines and associated structures shall include all joints, elbows, tees, etc and filter material unless separately itemised in the case of drainage pipes (contract clause in the Preamble AA3/654/Item K).

[55] The specific express clause in the Preamble (AA3/654 item K) prevails over SMM in the event of contradiction or discrepancy. It is only in the absence of the express clause in the Contract to the contrary that a contracting party can refer to and rely upon the provisions in the SMM. In the premises, the plaintiff cannot rely of the general clause of cross-reference to SMM as the basis of claiming for this alleged variation.

[56] In the premises this court finds that the priced item for drainage pipes was inclusive of pipe fittings and therefore this court agrees with DW4 that this item is not a variation.

Actuator with cabling

[57] In claiming the actuator with cabling, the plaintiff explains that the actuator is one of the components required to automatically control the operation of the pump sets and penstocks to ensure that the whole system functions as prescribed. According to the plaintiff, such components are described as requiring separate measurement in the bills of quantities (BQ).

[58] According to the plaintiff, actuator is supposed to be described as a separate item in the BQ to be priced separately from the pump sets and penstock. However, there is no specific item for actuator in the BQ of the contract.

[59] The defendant argues that actuator electrical cabling was not a variation. The defendant referred to the item 'supply and fix 900mm x 900mm CI penstock complete with C.I. framing, coupled with electricity operated actuators and necessary cabling for connection to electrical switch panel' has been included as part of the bill of quantities at *(AA1/123/Item K), (AA1/130/Item K), (AA1/139/Item K), (AA1/139/Item K)* and *(AA1/150/Item K)*.

[60] In the defendant's argument, the defendant has overlooked the express words *'(measured separately)'* which specifically appears in the full BQ description of the penstock listed as 'Sundries' under pump outlet. The relevant parts of the description of the context and item in *AA1/123, 130, 139 and 159* is reproduced below:

BILL NO. E.6.E — PUMP OUTLET

The following in Pump Outlet No 1

(Cont'd)

The Following R.C Wing Wall (cont'd)

Reinforced oncrete Grade 25 as described:-

...

High tensile rod reinforcement reinforcement as described:-

...

Fabric reinforcement cut to size:-

...

Sawn timber as described to:-

...

Sundries

Supply and fix 900mm x 900mm C.I. penstock complete with C.I. framing, coupled with electricity operated actuators and necessary cabling for connection to electrical switch panel *(measured separately)*

Essentially, a CI penstock (cast iron penstock) is a metal gate used for controlling water levels and flow rates in the pump outlets. When the words '(measured separately)' are used in juxtaposition with the CI penstock in the manner stipulated in the BQs the words 'measured separately' refers to the item of work which is not of the same character or nature as the CI penstock, a metallic gate. In the context of these BQ items, 'cabling for connection to electrical switch panel' is by nature and character electrical works which is of different nature and character from CI penstock (a metal gate). Moreover, by grammatical interpretation, the words 'measured separately' should refer to the item of work immediately preceding these words, namely 'cabling for connection to electrical switch panel'. A sensible and logical interpretation of these BQ items is that when describing the cast iron penstock for pricing, the

draftsman of the BQs could not or did not properly and accurately estimate the length of electrical cabling which would be required for connecting the cast iron penstock to the electrical switch panel, and hence the words 'measured separately' are inserted behind the item to stipulate for the measurement of the quantity and valuation of the cabling work.

[61] This court agrees with the plaintiff that the actuator electrical cabling is a variation to the contract works or alternatively, a measure and value item which ought to be measured and paid to the plaintiff-contractor separately from the CI penstock.

Concrete cover slab

[62] This court agrees with DW4 Mr Nicholas Ian Powell (defendant's expert) that since this item was certified by the CQS in the draft final account and has been admitted on behalf of the defendant, it should be included as part of the final values of works done here.

VALUES OF ORIGINAL CONTRACT WORKS IN PACKAGE 2 CONTRACT (MAIN TERMINAL BUILDING AND ASSOCIATED WORKS)

[63] In respect of the original contract works, the parties' respective valuations are as summarised in the table below:

Original Contract Works in Package 2:	Plaintiff's claim and amount	Defendant's position
Contract Preliminaries	5,838,659.80	5,739,659.80
Bill E1: CUB (Curbside Expansion)	9,576,482.70	9,800,960.30
Bill E2: Main Terminal Extension	11,135,527.80	8,554,575.88
Bill E3: Transfer Corridor Expansion	22,028,961.26	18,654,089.56
Bill E4: Existing Main Terminal Building	23,228,657.21	23,788,584.06
Bill E5:Interior Decoration Works	9,575,466.20	11,384,968.42
Bill E6: External Works	7,411,255.10	8,526,673.20
Addendum to external works	2,121,133.85	Included in Bill E6 (External Works)
Mechanical Works	24,636,338.19	24,636,338.19
Electrical Works	20,634,482.89	
Baggage In-Line Systems	16,000,000	16,180,000

Profit & Attendance on NSCs' works	266,860.70	275,267.88
Subtotal for Original Contract Works in Package 2	152,453,825.70	148,175,944.98
Nominated subcontractors (NSCs):		
Lift & Escalator Works	3,316,305	3,609,904.95
ID Customised Joinery	4,818,387.92	4,818,387.92
Internal Signage	1,518,450	1,518,450
Passenger Boarding Bridge Works	4,520,226.	4,780,046
Subtotal for NSCs	14,173,368.92	14,726,788.87

[64] In the present suit, the plaintiff's expert witness reproduces and relies upon the figures submitted by the plaintiff in its final account claims and expressed a general opinion that he considers the plaintiff's final claim for values of original contract works done in Package 2 to be fair and reasonable. However, neither the plaintiff's factual witnesses nor the plaintiff's expert witness has given any specific evidence or referred to any specific document to substantiate the plaintiff's claim figures for values of original contract works done in Package 2. What the plaintiff has done in the course of the trial was to demonstrate by specific evidence that several subitems of the defendant's draft final account for Package 2 works were erroneous or inaccurate.

[65] The defendant's draft final account evaluation for Package 2 works was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion. From the tabulated summary, it can be seen that there are items in which the consultant quantity surveyor (CQS) in the defendant's draft final account certified/recommended significantly higher figures than the plaintiff's claimed figures including items E1, E4, E5, and Baggage In-Line Systems.

[66] In the oral evidence of the plaintiff's expert witness, he alleged that the total amount of the plaintiff's claims for the value of original contract works done in Package 2 contract is approximately 3% higher than the contract BQ values and this is acceptable margin when re-measurement of quantities are carried out in comparison with the contract BQ quantities. This court finds that such evidence of the plaintiff's expert witness cannot be relied upon to justify an per the plaintiff's claims. Logically speaking, if the margin of 3% higher than the contract BQ quantities is acceptable measurement margin for the re-measurement quantities in comparison with the contract BQ quantities, then likewise the margin of 3% lower than the contract BQ quantities is also

acceptable measurement margin for the re-measurement quantities in comparison with the contract BQ quantities. While a contractor would like to use the margin of 3% higher to justify his global and unsubstantiated approach of estimation, the employer would also like to use the margin of 3% lower to justify his global and unsubstantiated approach of estimation to justify his global and unsubstantiated approach of estimation. As such, the argument is not relevant to valuation of works here.

[67] In the absence of a joint final measurement of quantities by both contracting parties, this court is left with the choice of considering which of the parties' valuations on various items of contract works is more accurate and reliable and should therefore be accepted on a balance of probabilities.

[68] On the overall aspects of valuation approaches, this court finds that the valuation approach adopted by the consultant quantity surveyor in the defendant's draft final account evaluation for Package 2 works, which was based on progress certificates incorporating the progressive site measurements and evaluations in the course of works until after practical completion, is relatively more accurate and reliable than the plaintiff's expert witness' approach of simply adopting the figures from the plaintiff's final claims without reference to specific documents. However, there are some subitems of the original contract works in Package 2 where the plaintiff has adduced specific and cogent evidence to demonstrate the error or inaccuracy in the CQS's valuation in such subitems. In the circumstances, this court finds and factually conclude as follows:

(a) where the plaintiff has not adduced any specific and cogent evidence to demonstrate the error or inaccuracy in the CQS's valuation in a relevant item of original contract works in the CQS's draft final account for Package 2 works, the CQS's valuation for that item of original contract works in Package 2 works should be accepted as the relatively more accurate and reliable valuation on a balance of probabilities; and

(b) where the plaintiff has adduced specific and cogent evidence to demonstrate the error or inaccuracy in the CQS's valuation in a relevant subitem of original contract works in the CQS's draft final account for Package 2 works, the CQS's valuation for that item of original contract works in Package 2 works subject to the correction and adjustment for the error or inaccuracy in that subitem should be accepted as the relatively more accurate and reliable valuation on a balance of probabilities.

Contract preliminaries (Package 2)

[69] The original contract preliminaries were intended to be fully paid when the contractor has practically completed the original contract works, and more so where there are also variation works which have been completed.

[70] In our present case, the plaintiff has practically completed the Package 2 works including the variation additional works. The defendant's witnesses have not adduced specific reason or evidence to show why part of the original contract preliminaries should be deducted.

[71] In the circumstances, this court agrees with plaintiff's submission that since the Phase 2 works (including variations) have been practically completed, the full amount of contract preliminaries should be certified and paid. As such, the contract preliminaries of RM5,838,659.80 as stated in the contract BQ should be certified and paid.

Bill E1: CUB (Curbside Expansion) (Package 2)

[72] In respect of Bill E1: CUB (Curbside Expansion), the plaintiff has not adduced any specific and cogent evidence to demonstrate any error or inaccuracy in the CQS's valuation in this item of original contract works in the CQS's draft final account for Package 2 works.

[73] Based on the reasons stated in paras 64–68 above, the CQS's valuation of RM9,800,960.30 for this item of original contract works in Package 2 works should be accepted as the relatively more accurate and reliable valuation on a balance of probabilities. Moreover, the defendant's figure for this item is also higher than plaintiff's claimed figure for this item.

Bill E2: Main terminal extension

[74] In respect of this item Bill E2: Main terminal extension the plaintiff has adduced specific and cogent evidence that the defendant has improperly deducted the value of the subitem on value of piling works.

[75] This court accepts defendant's evaluation in the CQS's draft final account on this item except for the subitem E2A regarding piling. This court agrees with the plaintiff's submission in paras 89 and 90 of the plaintiff's written submission that CQS erred and/or acted improperly in deducting quantities and values of piling works although they had been measured and evaluated in earlier payments up to progress certificate No 24 and many months after the completion of the piling works. The subtotal value of Bill E2: Main Terminal Extension should be RM8,554,920.68 + improperly deducted

value of piling works in Bill E2A. Except for the subitem on piling works, this court finds the CQS's draft final account valuation for this item to be preferred and more accurate.

[76] Piling works using the RC square piles were valued in progress certificates Nos 1 to 17 based on the original contract rates and quantities as agreed by the parties and consultants. This court accepts the plaintiff's evidence that the CQS acted erroneously and/or incorrectly in reducing the values and rates of piling works from progress certificate No 18 onwards and in the draft final account. This court also accepts the plaintiff's evidence that the reduced quantities used by the CQS in PC No 18 onwards were under-estimation, under-valuation and were also not supported by site records. The improperly-deducted value of Bill E2A piling is Certificate No 17 total amount and Progress Claim No 24 amount of Bill E2A (AB13/10, ABQ44/349) minus draft final account valuation for Bill E2A (AB14/34), ie RM1,366,567 – RM1,146,911.80 = RM219,655.20.

[77] Adjusting for the error in the reduction of value of the piling works, the total value of Bill E2: Main terminal extension is RM8,554,920.68 + RM219,655.20 = RM8,774,575.88.

[78] In the circumstances, this court finds that the total value of Bill E2: Main terminal extension is RM8,554,920.68 + RM219,655.20 = RM8,774,575.88

Bill E3: Transfer corridor expansion

[79] In respect of this item Bill E3: transfer corridor expansion the plaintiff has adduced specific and cogent evidence that the defendant has improperly deducted the value of the subitem on value of piling works.

[80] This court accepts the defendant's evaluation in the CQS's draft final account on this item except for the subitem E3A regarding piling. This court agrees with the plaintiff's submission in paras 89 and 90 of the plaintiff's written submission that CQS erred and/or acted improperly in deducting quantities and values of piling works although they had been measured and evaluated in earlier payments up to progress certificate No 24 and many months after the completion of the piling works. The subtotal value of Bill E3: transfer corridor expansion should be RM18,654,089.56 + improperly deducted value of piling works E3A. Except for the subitem on piling works, this court finds the CQS's draft final account valuation for this item to be preferred and more accurate. The improperly-deducted value of Bill E3A piling is Certificate No 17 total amount and progress claim No 24 amount of Bill E3A (*AB13/34*, *ABQ44/363*) minus draft final account valuation for Bill E3A

(*AB14/55*), ie RM2,244,418 – RM1,553,688.00 = RM690,730.00.

[81] The total value of Bill E3: transfer corridor expansion is RM18,654,089.56 + RM690,730 = RM19,344,819.56.

Bill E4: Existing Main Terminal Building (Package 2)

[82] In respect of this item Bill E4: existing Main Terminal Building, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under Bill E4 in the CQS's draft final account.

[83] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of 23,788,584.06 as more accurate and reliable valuation of Bill E4: existing Main Terminal Building.

[84] Moreover, the defendant's valuation for this Bill E4 in the CQS's draft final account is higher than the plaintiff's figure for this item.

Bill E5: Interior decoration works

[85] In respect of this item Bill E5: interior decoration works, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under Bill E5 in the CQS's draft final account.

[86] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of RM11,384,968.42 as more accurate and reliable valuation of Bill E5: Interior Decoration Works.

[87] Moreover, the defendant's valuation for this Bill E5 in the CQS's draft final account is higher than the plaintiff's figure for this item.

Bill E6: External works (Package 2)

[88] In respect of Bill E6: external works, the plaintiff claims in two sub-components External Works RM7,411,255.10 and Addendum RM2,121,133.85 while the defendant in the CQS's draft final account valued Bill E6: external works (inclusive of addendum) in the sum of RM8,526,673.20.

[89] In respect of Bill E6: external works, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under Bill E6 in the CQS's draft final account.

[90] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of RM8,526,673.20 as more accurate and reliable valuation of Bill E6: external works inclusive of addendum.

Baggage in-line systems

[91] In respect of this item baggage in-line systems, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under this item in the CQS's draft final account.

[92] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of RM16,180,000 as more accurate and reliable valuation of baggage in-line systems.

[93] Moreover, the defendant's valuation for this item in the CQS's draft final account is higher than the plaintiff's figure of RM16m for this item.

Profit and attendance (P&A) (Package 2)

[94] In respect of this item P & A, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under this item in the CQS's draft final account.

[95] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of RM275,267.88 as more accurate and reliable valuation of P&A.

[96] Moreover, the defendant's valuation for this item in the CQS's draft final account is higher than the plaintiff's figure of RM266,860.70 for this item.

Nominated subcontractors (NSC) (Package 3)

[97] In respect of nominated subcontractors' works (NSCs), the parties' respective valuations are as tabulated below:

Nominated subcontractors (NSCs):	Plaintiff's valuation	Defendant's valuation
Lift and Escalator Works	3,316,305	3,609,904.95
ID Customised Joinery	4,818,387.92	4,818,387.92
Internal Signage	1,518,450	1,518,450
Passenger Boarding Bridge Works	4,520,226	4,780,046

Subtotal for NSCs	14,173,368.92	14,726,788.87

[98] In respect of the NSCs' works, the plaintiff has not adduced any specific or cogent evidence of any error or improper deduction in the value of any of the subitems under this item in the CQS's draft final account.

[99] Based on the reasons stated in paras 64–68 above, this court accepts the defendant's valuation of RM14,726,788.87 as more accurate and reliable valuation of the total value of the NSCs' works.

[100] Moreover, the defendant's valuation for values of the NSCs' works in the CQS's draft final account is higher than the plaintiff's figure of RM14,173,368.92 as the total value of NSCs' works.

Summing-up on values of original contract works in Package 2

[101] The values of the original contract works in Package 2 are summarised in the table below:

	Court's findings on values (RM)
Original Contract Works in Package 2:	
Contract Preliminaries	5,838,659.80
Bill E1: CUB (Curbside Expansion)	9,800,960.30
Bill E2: Main Terminal Extension	8,774,575.88
Bill E3: Transfer Corridor Expansion	19,344,819.56
Bill E4: Existing Main Terminal Building	23,788,584.06
Bill E5:Interior Decoration Works	11,384,968.42
Bill E6: External Works	8,526,673.20
Addendum to external works	Included in Bill E6 (External Works)
Mechanical Works	24,636,338.19
Electrical Works	20,634,482.89
Baggage In-Line Systems	16,180,000
Profit & Attendance on NSCs' works	275,267.88
Subtotal for Original Contract Works in Package 2	149,185,330.18
Nominated subcontractors (NSCs):	
Lift & Escalator Works	3,609,904.95
ID Customised Joinery	4,818,387.92
Internal Signage	1,518,450
Passenger Boarding Bridge Works	4,780,046

Subtotal for NSCs	14,726,788.87

VARIATIONS IN PACKAGE 2 WORKS

[102] In the documents and the joint expert report ('JER 2') prepared and filed by the parties, the variation claims of the plaintiff were divided into three categories, namely 'VO Agreed', 'VO Recognised but not agreed upon' and 'Additional VO submitted'.

[103] During the hot-tubing session of the full trial on quantum issues, the parties' experts and their respective counsel clarified that the previous description of the three categories of variation claims is not accurate. The parties then mutually agreed to amend and correct the description of the three categories of variation claims into:

(a) 'VO agreed' which means these items of variation claims have been recognised by the defendant as variations and the quantum of most of these recognised variations have been agreed upon except for some items;

(b) 'VO submitted before completion of works' which means the items of variation claims submitted by the plaintiff before the completion of works but the defendant does not recognise them as variations; and

(c) 'Additional VO submitted after completion of works' which means the additional items of variation claims submitted by the plaintiff after the completion of works but the defendant does not recognise them as variations.

[104] The parties' respective positions on the variation claims are as tabulated below:

VOs Agreed:	Plaintiff's position	Defendant's position
Recommendation of Progress Claim No 26, as per column CQS Recommendation; 181 Nos of VOs evaluated out of 191 Nos claimed	12,504,295.68	11,082,357.32
VOs submitted before practical completion of the Works:		
Sheet piles (cofferdams)	3,000,000	652,395
Movement of piling machine	969,800	0
Bending H-beams	284,310	0

Other VOs recognised but not yet evaluated (balance 34 items)	1,572,727.33	Included in 'VOs Agreed'
Additional VOs submitted after draft Final Account:		
Temporary conveyor	316,600	316,600
Approach ramp	1,200,000	0
Cement screed	676,509.90	0
Aluminium glass frame	318,600	0
Repairing and upgrading work at Jalan Garuda	1,819,400	0

VOs agreed

[105] The plaintiff's version of evidence is that of a much bigger total amount of 191 VOs claimed in the building works, the consultants recognised 176 items as variations and the CQS confirmed and recommended 176 VOs with a total value of RM12,504,295.68. The defendant's version of evidence is that CQS only confirmed and recommended RM11,082,357.31.

[106] The specific analysis and assessment of this court on this item VOs agreed are summarised in the table below:

Certificate	Particulars	Encl and page
Progress Certificate No 25 (Penultimate Certificate) dated 30 December 2014	Signed and stamped by CQS. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39	Encl. 78 Pg 1

	Lists of Variation Orders, with summary at pg 130, showing totals of P's submissions of Dec 2014 as RM19,410,054.56, CQS Recommendation as RM12,504,295.68, % Paid as 85.12% and Amount Recommended as RM10,643,809.66.	Encl 78 pp 122–130
Progress Certificate No 26 (Penultimate Certificate No 2)	Not signed by CQS or Architect. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39 Lists of Variation Orders, with summary at pg. 263, showing totals of P's submissions of Dec 2014 as RM19,410,054.56, CQS Recommendation as RM12,504,295.68, % Paid as 85.12% and Amount Recommended as RM10,643,809.66.	Encl 78 p 131 Encl 79 pp 255–263
Progress Certificate No 27 (Penultimate Certificate No 3) dated 22.01.2016	Signed and stamped by CQS and Architect. HARGA ASAL KONTRAK 161,967,334.31 JUMLAH BERSIH TAMBAHAN/POTONGAN (As per BPC approved) 12,683,226.08 174,650,559.39	Encl 79 p 265

[107] The abovementioned summary and contemporaneous documents referred to show that in the course of the execution of works the defendant CQS recommended many time that the total values of the recognised variations (ie VOs Agreed) was RM12,504,295.68 but as at the interim stages the defendant's CQS recommended certification of the recognised variations at 82.15% as the extent of variation works executed as at the interim stage.

[108] In the project, the certificate of practical completion has been issued by the SO certifying that the works in Package 2 (including the variations) were practically completed. In the Package 2 certificate of practical completion, there is no list of balance incomplete works attached thereto.

[109] In the present case, none of the defendant's witnesses has produced any specific and cogent evidence to show which items of the recognised variations were allegedly incomplete, nor to show to what extent they are allegedly incomplete.

[110] In the circumstances, this court finds that on a balance of probabilities, the recognised variations (ie agreed VOs) had been practically completed and their full values should have been certified and paid to the plaintiff.

[111] Therefore, this court accepts the plaintiff's version of evidence as more probable and assesses this agreed VOs at a total value of RM12,504,295.68.

VO submitted before completion of works sheet piling (cofferdam)

[112] In respect of sheet piling, the plaintiff submits as follows in paras 152–176 of the plaintiff's written submissions:

> 152. This claim relates to the Plaintiff's claim of RM3,000,000.00 for sheet piling which is already included as a variation item which was recognized by JBA but which was not evaluated prior to En Mohd Fuzi's demise (which sum is comprised in the Plaintiff's claim for RM5,826,837.33 in paragraph 101 above, for variations recognized but not evaluated). The initial claim made by the Plaintiff for RM3,000,000.00 was a provisional claim as the final quantities in respect of the driven sheet piles had not been re-measured by the Plaintiff yet. Upon re-measurement of the quantities involved, the cost was determined as an additional RM1,571,640.00 over and above the sum of RM3,000,000.00 claimed. *See: AB5, pages 6–32*.
>
> 153. By way of background, the Plaintiff's overall claim in the sum of RM4,571,640.00 for sheet piling in respect of Package 2 is for pit excavation for pile caps, where such sheet piling should be described and measured as a separate item under the SMM, as it is a method of special shoring, and is not mere planking or strutting. As provided by the SMM, the term planking and strutting shall mean everything requisite to uphold the face of earthwork *other than special shoring*, where planking and strutting shall be considered as included with the items of excavation,

whereas sheet piling, which is a means of special shoring, shall be described separately and given in square metres. *See: AB2(a), page 23, item 13(a) and (b) and page 33, item 44(a)*.

154. DW2 in cross-examination attempted to suggest firstly, that the QS would only provide for sheet piling if it was reflected in the drawings, and that the Plaintiff, as contractor, ought to have known that sheet piling was required, and should have priced for it, even though it was not described separately in the BQ. *See: Notes of Evidence 26.4.2021, pages 7 to 10*.

155. The position taken by DW2 is untenable, as the SMM requires sheet piling to be described separately and therefore, it was up to the QS to consult with the Defendant's other consultants, to determine if sheet piling was necessary, *at the stage of preparation of the BQ for tender*.

156. Further, the position in a conventional contract, where the Plaintiff acted simply as a builder, is that the Plaintiff is only required to price for items appearing in the BQ, and is not required to 'read the Defendant's mind in advance' as it were, in trying to envisage all possible scenarios that could arise in the course of construction, in order to price for such 'anticipated' items. Here, the Defendant, through DW2, is trying to shift the burden to the Plaintiff to have pre-emptively priced for every possible construction scenario, even though the BQ did not set out such scenarios, to distract from the fundamental problem in this matter, *which is that the tender BQ was prepared before the entire design of the Project was finalized, and without sufficient consultation between the various consultants and without sufficient attention being paid by JBA to the site conditions, such that the majority of the BQ was provisional, and many items which ought to have been described and measured separately in the BQ were inadvertently omitted.*

157. As a result, the Plaintiff, as a builder, priced for the items expressly provided for in the BQ, and could not have anticipated the various complications which arose in the course of construction, as the Plaintiff simply did not have access to the relevant information at the material time and as the BQ was obviously incomplete. *See: Notes of Evidence, 12.8.2020, page 35*.

158. There are 2 elements to the misguided position taken by DW2, the first of which is that the Plaintiff ought to have pre-emptively priced for all possible scenarios, including the scenario that sheet piling was required, when it was not described or measured separately in the BQ. This pre-supposes that the Plaintiff was aware that deep excavation requiring special shoring in the form of sheet piling was required, when in fact, the Plaintiff only relied upon the tender documents including the tender BQ and the SMM, in pricing for the various items. *See: Notes of Evidence, 12.8.2020, page 36*.

159. DW2 was aware that bore tests were carried out prior to tender to enable the architect and/or the engineer to design the structures and the method of excavation. However, DW2 was not aware if the results of the bore tests were made known to the Plaintiff. In fact, the Plaintiff's position is that such test results were never made known to the Plaintiff, and there is no evidence of such disclosure. This has been confirmed by PW2 as well, see below. *See: Notes of Evidence, 26.4.2021, pages 4–5.*

160. DW2 then took the unusual and lackadaisical position that the QS did not require the bore tests results, although the QS was preparing the BQ for the purposes of the tender. DW2 went to the extent of questioning how a QS is supposed to measure when the item is not shown on the drawings. *See: Notes of Evidence, 26.4.2021, page 8.*

161. The response to this is that as a consultant, the duty is on the QS to actually 'consult' with other consultants at the time of preparation of the BQ, to determine what items need to be described and measured as separate items in the BQ. Hence the designation as 'consultant'. In this case, the bore test results were available at the time of preparation of the BQ for the tender, which DW2 knew, but he chose not to request for the same, taking the simplistic (and with respect, irresponsible position) that if the item was not specified in the drawing, the QS need not price for it, despite knowing that the SMM placed a burden on the QS to describe and measure separately the items as specified in the SMM. *See: Notes of Evidence, 26.4.2021, pages 5–7.*

162. If the QS had obtained the results of the bore test while preparing the BQ, the depth of excavation required and the fact that special shoring in the form of sheet piling was necessary to achieve that depth of excavation would have been clear at the stage of preparation of the BQ, and the item would have been included in the BQ. The Plaintiff would then have priced accordingly to include sheet piling, and there would be no dispute about whether sheet piling was a claimable item.

163. This reflects the overall attitude of JBA in the preparation of the BQ tender based on insufficient information, although that information was in fact available at the material time. As a result, the BQ omitted several important elements required during the construction phase, including, in this case, sheet piling. The Plaintiff, naturally, priced only for the items specifically described in the BQ, as the Plaintiff was made aware that the BQ was prepared in accordance with the SMM, which in turn, required sheet piling to be described and measured separately, if required for the construction phase.

164. The second element of DW2's misguided position is that the Plaintiff ought to have known the depth of excavation and therefore should have priced for sheet piling. In cross-examination, DW2 conceded that the BQ only provided for excavation to a maximum depth of 3m, and did not provide for sheet piling as required by the SMM. *See: Notes of Evidence, 26.4.2021, pages 9-10, See also AA3, page 703, items A to H.*

165. In fact, excavation at the pile caps for the Package 2 works was required up to a depth of 10.5m, as evidenced by photographs taken during the stage of construction of the pile caps. *See: AB12, pages 28-29*

166. The eventual depth of 10.5m is not disputed by the Defendant, as the Defendant's expert himself acknowledges that the Defendant has confirmed that excavation works to 4 types of pile caps was carried out to a depth of 10.5m. *See: Paragraphs 70-78, pages 23-24, DER 1.*

167. The Defendant's expert concludes that sheet piling is not payable by reference to the Preambles, which mirrors the further position taken by DW2, and that will be dealt with below. However, in dealing with the second element of DW2's position as referred to in paragraph 164 above, it can be concluded that the BQ only

referred to excavation to a depth of 3m, when in fact, excavation was required to a depth of 10.5m, which clearly would require special shoring in the form of sheet piling. As such, the Plaintiff submits that the claim for sheet piling should be allowed by reference to the SMM.

168. As noted above, the Defendant has relied on the Preamble to the Contract to attempt to deny the claim for sheet piling, in particular, relying on Preamble 1.4.2, and 6.0. *See: AA3, pages 635 & 639.*

169. The simple answer to this suggestion is that as per the SMM, the shoring which is deemed to be included in the excavation rates is limited to planking and strutting only, and special shoring must be described and measured separately. *See: Paragraph 152 above.*

170. Therefore, while Preamble 1.4.2 refers to 'all temporary work', it is to be construed in accordance with the SMM, to mean all temporary work involving planking and strutting only.

171. As for Preamble 6.0, this specifically identifies types of temporary works which are deemed included in the rates, and in terms of sheet piling, only temporary sheet piling for drainage is deemed to be included in the excavation rates, which is understandable, since if sheet piling for trench excavation for drainage is required, the sheet piling which has been used can be extracted and re-used as the excavation of the relevant trench progresses. Sheet piling for pit excavation is very different, and remains in place throughout the pile cap construction, particularly for excavation to a depth of 10.5m. In any event, sheet piling for pit excavation is not included in Preamble 6.0.

172. With regard to Paragraph 8 of the Standard Specifications For Building Works 2005, Section C which is also relied upon by the Defendant, this provision only requires the Plaintiff to ensure that the sides of the excavation are maintained in a safe and stable condition. It does not provide that the cost of maintaining the sides of the excavation is deemed to be included in the rates for excavation. The Plaintiff did comply with the requirement to maintain the sides of the excavation in a safe and stable condition by installing sheet piling, and in accordance with the SMM, the Defendant is required to pay for such sheet piling. *See: AA4, page 1041.*

173. Contrary to the Defendant's expert's conclusion that 'It is hence very clear that the rate paid for excavation includes any temporary sheet piling', on a proper interpretation of the Preambles and applying the SMM in accordance with Clause 26 of the Conditions, the rate paid for excavation does not include temporary sheet piling for pit excavation in the construction of the pile caps. As confirmed by DW2, and by the express provisions of the BQ, sawn formwork, which is temporary work, was in fact described and priced separately in the BQ. *See: Notes of Evidence, 26.4.2021, See also: AA3, page 677.*

174. In fortification of the Plaintiff's claim for sheet piling under Package 2, it should be noted that the Plaintiff's claim in respect of similar sheet piling for Package 1 has been paid by the Defendant as reflected in Payment Certificate No 11, and as such, the Defendant ought to be estopped from denying the Plaintiff's claim for sheet piling for Package 2. *See: ABQ2, pp. 532-533, See also: Boustead Trading (1985) Sdn Bhd v Arab Malaysian Merchant Bank Berhad* (supra).

175. The Defendant does not dispute the quantity involved as the Defendant's expert has agreed that a sum of RM652,395.00 is payable for the excavation element. *See: Paragraph 77, page 23, DER 1.*

176. In addition to the excavation element, the Plaintiff has also established on a balance of probabilities that it is entitled to the sheet piling element as well, of which the sum of RM3,000,000.00 has been claimed as variation recommended but not evaluated, and a sum of RM1,571,600.00 has been claimed as a further sum upon re-measurement, which quantities are not disputed by the Defendant.

[113] On the other hand, the defendant submits as follows in respect of sheet piling in paras 141–159 of the defendant's written submission:

141. The Plaintiff's claim is premised on the fact that it is a claim for excavation pile caps which should be measured separately under the SMM and under the Bill of Quantities, the Defendant did not make any provision sheet piling as a separate item *[WS-PW1/40]*. The Plaintiff also contends that because sheet piling works were allowed by the Defendant under the Supplementary Contract, it should similarly be allowed for the main contract.

142. It is the Defendant's position that the Plaintiff is not entitled to its claim for sheet piles as (i) there are no instructions for a variation from the SO pursuant to clause 24(a) of the main contract to carry out these works; (ii) they are temporary works which form part of the original scope of main contract works; and (iii) the Plaintiff has not adduced evidence to demonstrate that these works were in fact carried out and that it has incurred the additional sums. These are explained further in turn below.

There are no instructions for variation pursuant to Clause 24(a) of the main contract

143. The Plaintiff relies on correspondence from the Defendant in support of its contention that there were instructions to carry out sheet piling works:

(a) By way of letter dated 21.3.2011 from the Plaintiff to the Defendant, the Plaintiff first informed the Defendant of its intention to claim for sheet piles works *[AB5/16]*;

(b) By way of letter dated 22.3.2011, JBA-NAC informed the Defendant that the Plaintiff's claim for sheet pile is not allowed pursuant to Item 6 of the Preambles *[AB5/23]*;

(c) By way of letter dated 31.3.2011, the Plaintiff informed the Defendant that its basis for its claim for sheet piling works is that the same is needed to protect the adjacent building from damages that might occur and that the SMM allows for separate measurement of sheet piling works *[AB5/18]*;

(d) By way of letter dated 4.4.2011, JBA-NAC informed the Defendant that the Plaintiff's reference to Clause 26(b) of the main contract and the SMM are irrelevant *[AB5/20]*; and

(e) By way of letter dated 14.4.2011, the Defendant's Project Manager, PW2, informed the Plaintiff to proceed with the temporary sheet piling work *[AB5/19]*.

144. With regard to the letter dated 14.4.2011, however, the Defendant submits that this does not amount to a valid instruction as notwithstanding PW2 is a S.O. Representative, he does not have the authority to issue instructions with regard to matters involving time and cost relating to Clause 24 of the Contract (ie variations) without the S.O.'s approval. However, the Plaintiff has not adduced any evidence to prove that there was in fact an approval from the S.O.

145. Accordingly, the Defendant submits that there is no valid instruction pursuant to Clause 24(a) of the main contract with regard to the Plaintiff's claim for sheet piles.

The sheet piling works are temporary works under the main contract

146. It is the Defendant's position that the sheet piling works are temporary works under the main contract and as such, are part of the original scope of the works in the Bill of Quantities:

(a) Clause 1.4(1) of the Preambles to the Bill of Quantities states that the rates for all work in the Bill of Quantities shall include all temporary work as necessary and its subsequent removal including scaffolding, staging, supports, protective screens, other protection measures and the like *[AA3/635]*;

(b) Clause 6.1(b) of the Preambles to the Bill of Quantities states that all temporary woks shall be deemed to be covered by the rates in the Bill of Quantities shall include, amongst others, temporary works to form and construct permanent works such as temporary sheet piling for drainage *[AA3/639]*; and

(c) Clause 8.1 of the Standard Specifications for Building Works (2005) by Public Works Department of Malaysia states that the contractor shall ensure at all times that the sides of the excavation are maintained in a safe and stable condition and shall be responsible for the adequate provision of all shoring and strutting including sheet piling required for this purpose *[AA4/1041]*.

Accordingly, the main contract expressly stipulates that sheet piling is part of the Plaintiff's original scope of works under the main contract and as such, the same does not amount to a valid variation within the meaning of Clause 24(b) of the main contract.

147. During cross-examination of DW2, counsel for the Plaintiff sought to establish that the reason why sheet piling works are not included in the Bill of Quantities is due to the fact that the Defendant or QS had not taken into account the soil conditions for the Project at the tender stage as evident from the lack of soil test results and the requirement to carry out a Mackintosh probe in the Contract. Had this been done, the Plaintiff contends that the same would have been included in the Bill of Quantities despite being temporary works.

148. However, DW2 disagreed with this suggestion and clarified that unless the temporary works are shown in the tender or contract drawings, these works do not have to be provided for in the Bill of Quantities *[NOP/12/4]* ...

149. Counsel for the Plaintiff further sought to establish that sheet piling, which amounts to special shoring, has to be provided for separately as the SMM. However,

DW2 also disagreed with this suggestion and clarified that this is not the case as the SMM is merely a guide for measuring works and in any event, the sheet piling works are not provided for in the drawings *[NOP/12/7]*:

150. For these reasons, the Defendant submits that the sheet piling works are temporary works and the Plaintiff has not demonstrated that these works ought to have been provided in the Bill of Quantities. In any event, whilst the Bill of Quantities is to be in accordance with the SMM. Clause 2.1 of the Preambles to the Bill of Quantities stipulates that deviations from the SMM are not specifically stated or itemized and the Plaintiff in pricing the bills is deemed to have full knowledge of the deviations and accepted the method of measurement in the Bill of Quantities and should any item be unclear, the Plaintiff shall seek clarification during tender stage.

151. Accordingly, the Defendant submits that the Plaintiff's reliance on the SMM is misconceived as it is clear that the Bill of Quantities takes precedence and in any event, if the Plaintiff was aware of soil condition issues at the tender stage which then required sheet piling works to be carried out (which is denied), the Plaintiff ought to have clarified the same at the tender stage. However, the Plaintiff evidently did not do so.

152. It is the Defendant's position that the Plaintiff has failed to adduce evidence of the sheet piling works having been carried out. In particular, the Plaintiff has failed to adduce evidence of the quantities of sheet piling works carried out and the applicable rate of to be applied. This has been confirmed by the Defendant's expert in his report *[DER-1/23]*. The Plaintiff's expert is also unable to justify the additional sum claimed with a cogent basis either through his reports or during the hot-tubbing session. As such, the Defendant submits that the Plaintiff has failed to discharge its burden of proving that it is in fact entitled to the additional sums claimed for sheet piling works.

153. The Plaintiff has also failed to adduce any supporting documents or evidence to demonstrate that it has incurred the additional sum for the sheet piling.

154. It is the Plaintiff's case that the sheet piling works have in fact been carried out as the same is reflected in the interim certificates *[NOP/10/87]*. However, DW2 clarified that this does not mean that the additional sums claimed by the Plaintiff is accepted as an assessment needs to be carried out with the supporting evidence which the Plaintiff was unable to provide:

155. During cross-examination of DW2, counsel for the Plaintiff sought to establish that the works had in fact been carried out by referring to the photographs at *[AB12/28 to 29]*.

156. However, the Defendant submits that these photographs are not admissible evidence as the Plaintiff has not satisfied the mandatory requirements stated in Section 90A of the EA *[DBA/1]*:

(a) Section 90A(1) of the EA states, inter alia, that, a document produced by a computer shall be admissible as evidence of any fact stated therein if the document was produced by the computer in the course of its ordinary use. Section 90A(2) of the EA states that it may be proved that a document produced by a computer in the course of its ordinary use by tendering to the to the court a certificate signed by a person who either before or after

the production of the document by the computer is responsible for the management of the operation of that computer, or for the conduct of the activities for which that computer was used;

(b) It is well established that a digital camera comes within the definition of a 'computer' in the EA and photographs from the same are accepted as 'documents produced from a computer' (*Bank Pembangunan (M) Bhd v SASACOM Sdn Bhd* [2013] 4 MLJ 735; [2011] 10 CLJ 51 *[DBA/24]*);

(c) In the Federal Court case of *Ahmad Najib bin Aris v Public Prosecutor* [2009] 2 MLJ 613; [2009] 2 CLJ 800 *[DBA/25]*, the Federal Court reaffirmed the trite principle that the fact that a document was produced by a computer in the course of its ordinary use may be proved by either one of the following methods:

(i) by the tendering in evidence of a certificate under s 90A(2) of the EA; or

(ii) by way of oral evidence. Such oral evidence must consist not only a statement that the document was produced by a computer in the course of its ordinary use but also the matters presumed under s 90A(4) of the EA, namely that computer was in good working order and was operating properly in all respects throughout the material part of the period during which the document was produced.

(d) A document that that fails to satisfy the requirements in s 90A of the EA is inadmissible notwithstanding if there was no objection for it to be marked as an exhibit when it was tendered as such during the trial (*Public Prosecutor v Lee Kim Seng* [2013] 7 MLJ 844; [2013] 1 CLJ 393 *[DBA/26]*).

157. During the course of the trial, the Plaintiff failed to provide either a certificate under s 90A(2) of the EA or any oral evidence that the photographs contained in *AB12* were produced by a digital camera in the course of its ordinary use, and that said digital camera was in good working order and operating properly when the photographs were taken. On this basis, the Defendant submits that all the photographs produced by the Plaintiff in *AB12 are inadmissible.*

158. Further, the Defendant submits that merely because the Defendant had allowed for sheet piling works for the Supplementary Contract, it does not mean that this should similarly be the case for the main contract as the works under the Supplementary Contract are of a different nature from that under the main contract. In particular, the ADW works under the Supplementary Contract relates to upgrading of the drainage system at the airside whereas the main contract works involve construction works to upgrade the Main Terminal Building itself.

159. In any event, the Defendant submits that even if the sheet piling works had been carried out, the Plaintiff is only entitled to the sum of RM 652,395 at most. In this regard, the Defendant relies on the assessment by its expert which is calculated at a rate of RM61/m3 and 10,965m3 in quantities *[DER-1/23]*.

[114] On the question of admissibility of the photographs, these photographs are included in Part B of the Agreed Bundles of Documents whereby the parties agreed that these photographs are authentic. After having agreed to the authenticity of the photographs, it is too late for the defendant to now insist that there must be s 90A certificate or proof of compliance with s 90A of the Evidence Act before the photographs are admissible in evidence. In the present case, the plaintiff's witnesses have confirmed that the photographs in the Part B Agreed Bundles are photographs taken at this project site and none of the defendant's witnesses has alleged that any of the photographs in the Part B bundles is not reflective of the project site. In some of the photographs, parts of the passenger transfer corridor and the main terminal building can be seen in the photographs. In the circumstances, this court rejects the defendant's contention against the admissibility of the photographs in Part B bundles of documents.

[115] As regards the defendant's argument on the instruction on sheet piling, this court finds that there was in fact written letter and/or document from the defendant's authorised representative which approved the plaintiff's request to carry out sheet piling. See, for example, *AB4/85*, *91* and *92*, *AB4/14–19*.

[116] This court also disagrees with the defendant's argument that the sheet piling works should be rejected as a variation simply because it is a temporary work. In the contract bills of quantities and in the SMM, there are many items of temporary works which are listed as separate items to be priced and paid separately in addition to the permanent works which the temporary works serve to facilitate the construction of the permanent works. Examples include (a) timber formworks used in the construction of reinforced concrete structures; (b) excavation and backfilling for construction of pilecaps and ground beams; etc. As such, the mere fact that an item of work is a temporary work does not render it a non-claimable item. It depends on the terms of the contract (which also incorporate the general provisions of SMM) interpreted in light of the nature and extent of the temporary work involved.

[117] This court also rejects the defendant's argument that no sheet piling was in fact installed in the course of the construction of pilecaps in the Package 2 works. The evidence of the witness in our present case and the photographs in Part B of the Agreed Bundles of Documents clearly show the sheet piling in place at the various pilecap pits at the project site, There are also correspondence between the plaintiff's project staff and the defendant's project staff on the execution of sheet oiling in Package 2 works. Even the defendant's C&S Consultant, when commenting on the plaintiff's claims for sheet piling as variation, has categorically confirmed that sheet piling was carried out at 60% of the pilecaps in the Package 2 works: see *AB15/620–631*.

[118] The *original* depth of pilecaps and excavation for pile caps was only three meter. At the site, the depth of many of the pile caps excavation was increased to 10.5 meter, a very substantial increase in depth for soil excavation. This court agrees with the plaintiff's submission that pilecaps construction at a depth of 10.5 meter excavation falls with the different category of 'deep excavation' in contrast with the originally specified three meter excavation for pilecaps which did not involve any deep excavation.

[119] This court finds that in the actual execution of pilecap excavation and pilecap construction involving the deep excavation of 10.5 meter depth, the plaintiff installed the interlocking sheet piles which are coupled and locked with steel beams and bracings all surround the pilecap pits, and the resulting protection works were similar or akin to cofferdams (see, for example, photographs in encl 124 pp 28–29).

[120] This court finds that the cofferdams/interlocking sheet piles served the dual purposes of: (i) protect the existing adjacent building from damage in the course of the pilecap construction works with deep excavation of 10.5 meter (or approx 40 ft) (as stated by the plaintiff's project manager in *AB5/18* and commented by the defendant's CQS in *AB5/20*); and (ii) to hold back the soft ground surrounding the pilecaps in order to enable the construction of pilecaps) as stated by PW2 Fazil (the defendant's ex-manager) in *AB5/19*).

[121] Having considered the terms of contract, SMM and the parties' submissions, this court agrees with the plaintiff that sheet piles/cofferdams at the Package 2 pilecap construction for much deeper pilecap of 10.5m depth (s compared with the BQ item of three meter depth) constituted a variation. Increasing the depth of pilecaps from the BQ depth of 3m to the revised depth of 10.5m is an alteration or modification of the design and/or quality of works as shown upon the contract drawings and/or bills of quantities within the meaning of cl 24 of the contract (*AA3/427*).

[122] On the question of quantum, the plaintiff's summary of quantities in *AB5/7* is not corroborated by specific documents. The court prefers the quantity as reported by the Consultant C&S Engineer ZL in their letter dated 6 April 2015 backed up by photographs and piling layout (*AB15/620–631*), only about 60% of the Zone 2 of 42 pilecaps (which were bigger and deeper pilecaps) were constructed with sheet piles/cofferdams.

[123] The rate of RM450/m2 claimed by the plaintiff was based on the rate of sheet piles approved and certified in Package 1 works, and the defendant has not testified as to a different rate. As the sheet piling works in Package 1 works and in the Package 2 works were carried out in the same project and at times which are sufficiently proximate to each other, this court does not find any

reason for applying two different rates for sheet piling in Package 1 works and Package 2 works. In the circumstances, this court finds that the rate of RM450/m2 which was approved and certified for sheet piling in Package 1 works should also be used for sheet piling in Package 2 works.

[124] Taking into account that DW3 has confirmed that at least the deeper excavation should be at higher rate (increasing excavation value to RM652,395 which has not been included in the draft final account), that at the time of the project the plaintiff quoted RMm for such variation works, and that RM4,571,640 is excessive by reason of excessive quantity used, this court finds that a reasonable amount of this variation is RM3m.

Movement of piling machine

[125] In respect of the claim on movement of piling machines, the plaintiff in paras 177–190 of the plaintiff's written submission submits as follows:

> 177. Included in the Plaintiff's claim for variations which have been recommended but not evaluated is a claim for the additional movement in terms of mobilization and de-mobilization of 3 types of piling frames, the Hydraulic Drop Hammer, the 250 ton Jack Pile and the 600 ton Jack Pile, beyond that provided for in the BQ, in the sums of RM155,400.00, RM409,400.00 and RM405,000.00 respectively. *See: ABQ 18, Interim Payment Certificate No. 26, Page 263, Item 186*
>
> 178. The provisional BQ provides for 4 items of mobilization and de-mobilization of the piling frame at the site, which was based on a single site possession date. However, due to the Project site being a live airport, the Defendant was unable to provide the Plaintiff with site possession on 1 specific date, and instead, required the Plaintiff to mobilize and de-mobilize its piling equipment on various occasions to meet the Defendant's own requirements.
>
> 179. By its letter dated 18 May 2011, the Plaintiff placed on record the fact that it was compelled by the Defendant to mobilize and de-mobilize its piling equipment on many occasions and provided examples of such instructions. *See: AB5, pp 35–37*
>
> 180. The Plaintiff has adduced evidence of the various occasions of mobilization and de-mobilization of the piling frame which reflects a total of 22 separate occasions where this had to be done. After deducting the 4 items of mobilization and de-mobilization provided for in the provisional BQ, there are an additional 18 occasions of mobilization and de-mobilization which have not been provided for in the provisional BQ which arose as a result of the Defendant's instructions. Therefore, the Plaintiff has made a claim for the additional 18 occasions of mobilization and de-mobilization as a variation item, in the total sum of RM969,800.00, which has been recommended by JBA for payment, but has not been evaluated as yet. *See: AB5, pp 38–101*
>
> 181. The Defendant has denied this claim on the basis that the BQ already provides for the movement of the piling frame about the site. *See: AA3, pages 669, 698, 747 and AA4, page 937*

182. The Plaintiff submits that some confusion may have arisen from the use of the term 'movement' and 'mobilization' and 'de-mobilization' interchangeably. In the Plaintiff's claim, the Plaintiff is essentially claiming for the mobilization and de-mobilization of the relevant piling rigs on more occasions than that contemplated in the BQ. The BQ for the relevant areas, being the Curbside Expansion, the Terminal Building Extension, the Transfer Corridor Expansion and the External Works, provides for 2 items in relation to the piling rig, being the transportation to site, handling, assembling, erecting, dismantling and removal of the rig (the mobilization and de-mobilization item) and secondly, the movement and handling about the site for execution of the piling operations (the movement item). *See: For example, AA3 page 669*

183. The Plaintiff's claim is for the first item of mobilization and de-mobilization of the rigs, as explained in the letter dated 18 May 2011, where the Plaintiff states 'All the above obstruction required a total 20 nos. mobilizing and demobilizing of our piling equipment, tools and ancillary equipment.' *See: AB5, pages 35–36*

184. However, in the Defendant's Interim Payment Certificate No. 26, the QS Consultant has recommended the item as 'Movement of piling machine'. *See: ABQ18, page 263, item 186*

185. The Defendant relies on the second item of the BQ which provides for 'the movement and handling about the site as often and whenever necessary' to suggest that the BQ already provides for all necessary movement of the piling rigs. However, this is not an answer to the Plaintiff's claim, which is for mobilization and de-mobilization of the rigs on more occasions than provided for in the BQ. The BQ only provides for 1 occasion of mobilization and de-mobilization in each area, presumably as it was not contemplated that the Plaintiff would be required to de-mobilize the piling rigs before completion of the works at that particular area.

186. However, as the airport site was a live brownfield site, the Plaintiff's access to the entire work site was limited, and the Plaintiff was required to de-mobilize and re-mobilize the rigs on several occasions upon the instructions of the Defendant, as set out in the supporting documents. Hence the Plaintiff's claim in respect of 18 events of mobilization and de-mobilization of the relevant piling rigs, over and above the 4 events already provided for each area in the BQ.

187. In cross-examination, DW2 appeared to suggest that the Plaintiff ought to have priced for multiple mobilization and de-mobilization events, as the Plaintiff was aware that work at the site had to be done sequentially, and ought to have anticipated multiple events of mobilization and de-mobilization. *See: Notes of Evidence, 16.4.2021, page 5.*

188. Respectfully, the Plaintiff submits that such a position is entirely unreasonable, as there was no way the Plaintiff could have anticipated the number of occasions on which the Defendant would instruct the Plaintiff to de-mobilize and re-mobilize the piling rigs, at the tender stage. Again, the position of DW2 appears to be that the Plaintiff ought to have been able to read the mind of the Defendant at the tender stage and to anticipate the number of instructions the Defendant would issue to mobilize and de-mobilize the piling rigs and then to price for the same. The erroneous nature of such a position is compounded by the fact that in the BQ, the first element providing for mobilization and de-mobilization of the piling rig is stated to be *Not Provisional*, which would suggest that the BQ was only intended to

provide for 1 event of mob and de-mob in each area. *See: For example, AA3 page 669*

189. PW2 confirmed in detail the instructions from the Defendant to the Plaintiff to mobilize and de-mobilize the piling rigs in several locations. *See: Notes of Evidence, 14.8.2020, page 23*

190. As such, the Plaintiff submits that it has established the claim for mobilization and de-mobilization of the piling rigs in the sum of RM969,800.00 on a balance of probabilities.

[126] In rebuttal to the claim for movement of piling machines, the defendant submits as follows in paras 161–175 of the defendant's written submissions:

161. The Plaintiff claims the sum of RM969,800.00 for the alleged 18 additional mobilization and de-mobilization of piling machine. The basis of the Plaintiff's claim is that although the Bill of Quantities makes provision for 4 mobilization and de-mobilization of piling machines, the Defendant was unable to provide site possession on one specific date as it was a live and operating airport and as such, the Plaintiff was required to mobilize and de-mobilize accordingly *[WS-PW1/40]*.

162. It is the Defendant's position that the Plaintiff is not entitled to the additional sum claimed for the same as: (i) there were no instructions for variation pursuant to Clause 24(a) of the main contract; (ii) the sequence of the main contract works were made known to the Plaintiff at the tender stage; (iii) the Bill of Quantities has taken into account such sequence of works and is provisional in any event; and (iv) the Plaintiff has not provided any evidence of the sums incurred for the alleged additional movement.

There are no instructions for variation pursuant to Clause 24(a) of the main contract

163. The Plaintiff relies on its letter dated 18.5.2011 to the Project Manager in support of its contention that it had placed on record the fact that it was allegedly compelled by the Defendant to mobilize and be-mobilize its piling equipment on many occasions and that it had provided examples of such instructions *[AB5/35]* and *[WS-PW1/41]*.

164. However, the Defendant submits that the Plaintiff's letter dated 18.5.2011 does not in any way amount to a valid instruction from the S.O. pursuant to Clause 24(a) of the main contract, instructing the Plaintiff to carry out additional movements of piling machine for the main contract works.

165. Accordingly, the Defendant submits that the Plaintiff's claim for the additional movements of piling machine ought to be dismissed at the outset by this Honourable Court.

Sequence of works is provided

166. With regard to (i), the Plaintiff was aware since the tender stage that the main contract works would be carried out sequentially and in zones from the outside to the inside, due to the live and operating nature of the airport. This is evident from the provisions of the Preliminaries of the main contract and the Plaintiff's own work programme (please see Part G.2.1 below). As such, the Plaintiff ought to have taken into consideration the sequence of works in planning the necessary movements of piling machines.

167. This point has also been established during trial:

Cross-examination of PW1:

PW1 admits that the Plaintiff was aware of its obligation to carry out the works sequentially under the main contract and as such, the Plaintiff ought to have taken into account the necessary movement of piling machines *[NOP/2/23]* ...

Cross-examination of DW2:

DW2 also clarified that because the works were to be carried out sequentially, the Plaintiff should have anticipated the same in pricing the main contract *[NOP/11/5]*:

168. Accordingly, the Defendant submits that the Plaintiff's claim is premised on its failure to properly take into consideration the sequence of works in planning the necessary number of movements of piling machines. As such, the Plaintiff is not entitled to any additional costs claimed for this item.

Bill of Quantities provides for movement of machineries

169. With regard to (ii), the Bill of Quantities expressly provide for the movement and handling of piling equipment, plant, tools and ancillary equipment. The Defendant refers to the following parts of the bills of quantities which state this:

(a) Bill E.1.A (Prestressed spun concrete pile) *[AA3/669]*;

(b) Bill E.2.A (Prestressed spun concrete pile) *[AA3/698]*;

(c) Bill E.3.A (Prestressed spun concrete pile) *[AA3/747]*; and

(d) Bill E.6.G (Pump house and suction tank) *[AA4/937]*.

170. Further, these parts of the Bill of Quantities expressly stipulate that they are not provisional and as such, the prices therein are fixed. This was also established during cross-examination of PW1 and is not disputed *[NOP/2/24]* ...

171. Additionally, the Defendant's expert confirms that based on his assessment, the Plaintiff is not entitled to any additional sums for this item of work.

The Plaintiff has not adduced any evidence of the sum incurred for additional movement of piling machines

172. It is the Defendant's position that the Plaintiff has failed to adduce evidence of the additional movement of piling machines having been carried out. The Plaintiff's expert is also unable to justify the additional sum claimed with a cogent basis either through his reports or during the hot-tubbing session. As such, the Defendant submits that the Plaintiff has failed to discharge its burden of proving that it is in fact entitled to the additional sums claimed in relation to the additional movements of piling machine.

173. The Plaintiff has also failed to adduce any supporting documents or evidence to demonstrate that it has incurred the additional sum for the additional movements of piling machines.

174. Based on the above reasons, the Defendant submits that the Plaintiff is not entitled to any additional sums claimed relating to movement of piling machines.

175. Without prejudice to the aforesaid, in the event this Honourable Court finds that the 22 movements of piling machines amount to valid variations under the

Contract, the Defendant relies on its expert's quantum assessment of the same submits that the Plaintiff is only entitled to the sum of RM 231,538.74, a breakdown of which can be found at *[JER-2/Appendix D (item C)]*.

176. Based on the above reasons, the Defendant submits that the Plaintiff has not proven its claim for additional movement of piling machines.

[127] In the first place, this court finds that the plaintiff has misunderstood the meanings of the terminologies 'movement of construction plant', 'mobilisation of construction plant' and 'demobilisation of construction plant'. The terminologies 'mobilisation' and 'demobilisation' of construction are juxtaposed and used in the contract bills of quantities in this project, as is also the standard practice in the construction industry, to mean the entire process of mobilising the construction plant from outside the project site to the project site for use throughout the construction period, and thereafter subsequent to the completion of the relevant works, demobilising the same from the project site to a place outside the project site. The entire process of mobilisation and demobilisation of the construction plant includes: (a) finding a suitable construction plant in good working condition which is available for use in the project; (b) making firm and binding commitment (including the necessary initial payments) to procure the construction plant for use in the project; (c) on-loading and transporting the construction plant to the project site, usually by a low-loader; (d) unloading the construction plant at the project site; and (e) getting the construction plant in readiness for execution of construction works at the project site. The terminology 'movement of construction plant' means the movements of the construction plant within the site for executing construction works at various areas within the site at various times and stages of the project works before the completion of the relevant works.

[128] In the present case, there are allegations of multiple movements of the piling machines within the site but there is no allegation or evidence of any demobilisation of the piling machines out of the project site and then re-mobilising again from outside to within the project site. All the movements of the piling machines within the project site are merely movements of piling machines within the site which did not constitute demobilisation and re-mobilisation of the piling machines.

[129] In the present case, the contract prohibits the contractor from demobilising any construction plant from the site prior to the completion of the works without the prior written approval of the SO's representative: see Preliminaries item A at AA3/578 of the bills of quantities. Here, there is no evidence of any approval from demobilising any piling machine from the project site prior to the completion of the piling works.

[130] As correctly submitted by the defendant, the bill of quantities expressly provide for the movement and handling of piling equipment, plant, tools and ancillary equipment as part of the priced rates for the works. See the following parts of the bills of quantities:

(a) Bill E.1.A (prestressed spun concrete pile) *(AA3/669)*;

(b) Bill E.2.A (prestressed spun concrete pile) *(AA3/698)*;

(c) Bill E.3.A (prestressed spun concrete pile) *(AA3/747)*; and

(d) Bill E.6.G (pump house and suction tank) *(AA4/937)*.

[131] In the premises, movements of piling machines within the site did not constitute variation.

[132] Further or alternatively, this court agrees with the defendant that the plaintiff has failed to specifically prove the alleged additional costs of movements of piling machines within the site. There is no proper record of the time taken for each alleged additional movement, the distance of the alleged movement, or the cost of the piling machine.

[133] It is erroneous for the plaintiff to use the BQ item on 'mobilisation and demobilisation' to try to compute the alleged costs of movements of piling machines. As explained in para 127 above, 'mobilisation and demobilisation' of piling machines involves much more than mere movement of piling machines within the site. Moreover, the BQ items on 'mobilisation and demobilisation' of piling machines involve procurement, making of initial payments, and transportation from outside the site to the site which are not the same as movements of piling machines within the site.

[134] In the circumstances, this court agrees with the defendant's submissions on movements of piling machines and therefore dismisses this item of claim.

Bending H-beams

[135] The plaintiff claims the sum of RM284,310 for the bending of H-beams. The basis of the plaintiff's claim is that the bill of quantities did not provide sufficient particulars relating to the H-beam for the main portion of roof of the main terminal building ('wavy roof') and as such, the plaintiff had to devise its own fabrication method which involved cutting the H-beams into 'T' sections and performing roll bending on the section which were re-attached by welding *(WS-PW42)*. The plaintiff also contends that the defendant did not object to the quotation submitted by it and thus proceed to carry out the works.

[136] It is the defendant's position that the plaintiff is not entitled to the additional sum claimed for this item for these reasons: (i) there are no instructions from the SO for a variation pursuant to cl 24(a) of the main contract; (ii) the bending of the H-beam is part of the plaintiff's original scope of the main contract works; (iii) and the plaintiff has not adduced any evidence to demonstrate that it has incurred the additional sums.

[137] In the contract drawings, the shape, appearance and dimensions of the wavy roof to be constructed are shown clearly and specifically.

[138] In the contract bills of quantities Bill No E2B — building works (*AA3/828 to 831*), the various specific components of the wavy roof were expressly stated by the BQ and priced for by the plaintiff. And ll these components repeatedly use the words 'Wavy Roof Canopy'.

[139] Bill No E2B — Building Works of the contract BQs is comprised of component including 'Design, supply and install complete special knob joint to suit column complete with 4 Nos. outlet of 275mm diameter *sloping strut in varying degrees* and all in accordance to specialist specification and recommendation' (AA3/828 items F to G), 'Supply, delivery and install complete mild steel Universal Beam (UB) A. 356mm x 171mm x 45kg/m as rafter *in wavy shape and curve* (in No 33), ...' (AA3/829 item A); 'Roof Covering: Supply and install ... roofing system generally constructed of BST Standing Seams *Rolled Curve in clean colorbond* ...' (AA3/830).

[140] The contract drawings and bills of quantities are clear and specific that whatever components and parts that are used to support or strut the wavy roof canopy shall also fit in with the wavy shape of the roof canopy.

[141] It is therefore within the original scope of works on the wavy roof canopy that the steel H-beams which the plaintiff used to support or strut the wavy roof canopy shall also be supplied with bending to fit in with the curved shape of the wavy roof canopy.

[142] As the contract drawings and the contract bills of quantities have expressly and specifically provided for the shape and details of the wavy roof canopy and its components, there is no room for the general provisions of the SMM to apply to the steel H-beams in the wavy roof canopy.

[143] The contractor's attempt to rely on the general provisions of the SMM in spite of the express and specific terms of the contract drawings and bills of quantities is erroneous as well as a dangerous argument resembling a double-edged sword which can unjustly hit employers and contractors alike. If the contractor can lawfully rely on the general provisions of the SMM in spite

of the express and specific terms of the contract drawings and bills of quantities on a particular item of work to argue that a higher rate should apply to that item of work, then where the contract drawings and/or bills of quantities stipulate other items of works which are simpler or cheaper than those provided in the SMM, the employer can also similarly rely on the general provisions of the SMM in spite of the express and specific terms of the contract drawings and bills of quantities on other items of work to argue that lower rates should apply to those items of work.

[144] In the premises, this court has held that bending H-beams into curve shape to fit in with the shape of the wavy roof canopy in the project here was not a variation.

Other 37 variation orders recognized but not paid

[145] The plaintiff claims the sum of RM1,572,727.33 for a total of 37 variation items which allegedly have been recognised by the QS or the defendant, but not paid. The plaintiff's claim is premised on interim claim No 26 *(ABQ18/130)*.

[146] At the trial, the plaintiff's witnesses have not testified what these 37 variation claim items were or in what way they were variations. Neither has any of the plaintiff's witnesses shown that these 37 items of variation claims were not included in the CQS's recommendation on variations.

[147] In opposing these variation claims the defendant has submitted that the plaintiff is not entitled to this sum for the alleged variation works as the plaintiff has failed to discharge its burden in proving that it is in fact entitled to this additional sum as a result of having carried out the 37 variation orders on site.

[148] At the trial, the defendant's expert has identified that some of these variations have been included in the main contract draft FC and forms part of the agreed VO. In this regard, the defendant refers to Appendix A of the defendant's expert's Rebuttal Report *(DER-2/Appendix A)*.

[149] In the circumstances, this court finds that that the plaintiff has failed to prove that these 37 claim items constituted variations.

[150] This court also agrees with the defendant that the 37 variation claims overlap with the items in the abovementioned 'VOs Agreed' which has been allowed in paras 105–111 above. Any award of these 37 variation claims in addition to the 'VOs Agreed' would tantamount to double recovery.

Temporary conveyor

[151] The plaintiff claims the sum of RM316,600 for the installation of a temporary baggage handling system conveyor to be used immediately for airport operations, pending the installation of a permanent conveyor system connected to the x-ray equipment *(WS-PW1/37).*

[152] There would appear to be no issue with the plaintiff's claim for the sum of RM316,600 in respect of the installation of the temporary BHS conveyor system. *See AB5, pp 149–159; see also p 7 JER-2.* Both parties' experts are of the common opinion that the temporary conveyor belt was a variation.

[153] However, the plaintiff in its written submissions took the position that the plaintiff is not entitled to this claim as: (i) there is no valid instruction pursuant to cl 24(a) of the main contract to carry out these works; and (ii) the plaintiff has failed to adduce evidence that it has incurred sums to carry out these temporary conveyor works.

[154] The witnesses have testified that the temporary conveyor belt was in fact supplied and installed at the main terminal building, and was used to handle baggage during the interim period pending the installation of a permanent conveyor system.

[155] By its very nature, the supply and installation of the temporary conveyor belt involved the employer's specification as to the type and capacity and speed of the conveyor belt, the exact location and length of the conveyor belt, the handing over of the relevant parts of the live airport Main Terminal Building for the contractor to install the temporary conveyor, and the testing of the temporary conveyor before it was put to use by passengers. After the installation, the temporary conveyor belt would be operated by the airport personnel for use by numerous passengers during the interim period of significant duration. In light of the above facts and features, it is baseless to suggest that the temporary conveyor belt was supplied or installed without any instruction or approval of the defendant-employer.

[156] In the circumstances this court has held that the temporary conveyor belt was a variation with a value of RM316,600 as agreed by the experts of the respective parties.

Approach ramp

[157] This item refers to the construction of the approach and exit ramps at the entrance to the main terminal building. The approach ramp up led to the drop off/waiting area which then led to the exit ramp down. For clarity, the

plaintiff's claim for RM1.2m relates solely to the ramp up and ramp down construction, and not to the construction of the central drop off/waiting area.

[158] In claiming the approach ramp as a variation, the plaintiff submitted that the itemised descriptions of these ramps was wrongly described in the provisional BQ using cast *in situ* construction measurements, whereas construction based on the original requirement would have to be by way of a proprietary pre-cast box girder system as it would have required the construction of box girders which are pre-cast fabrications based on a proprietary specialist system. The plaintiff submitted that the dimensions of the box girder as indicated in the drawings, inter alia, with a span of more than ten meter in width, as well as the fact that the drawings required a suspended system resting on the columns upon flexible joints with bearings obviously require proprietary pre-cast system, as it would have been physically impossible to construct a suspended system of that nature to be cast *in situ*, referring to *AA9, p 2120.*

[159] In paras 105–123 of the plaintiff's written submissions, the plaintiff submitted as follows regarding its claim for the approach ramp:

> 105. 'Firstly, it must be noted that it was a term of the Contract that the BQ was prepared in accordance with the Standard Method of Measurement of Building Works 1st Edition (Metric) March 1976 ('SMM'), and any deviation from the SMM had to be expressly stated in order for the deviation to apply. PW1 confirmed that the Plaintiff therefore naturally relied on the SMM in pricing the works at the tender stage. *See: AA3, Clause 26(b), Preambles page 637 & AB2(a) See also Notes of Evidence 15.4.2021, page 21, Notes of Evidence 12.8.2020, page 36.*
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> 106. The Plaintiff submits that Items 31(a) and (b) of the SMM relating to precast concrete work requires that precast work shall be given separately and measured in accordance with the rules for measurement of natural and shall be described as 'including all moulds, finished faces, and hoisting and setting.' The classification of precast units is as set out in Item 56. *See: Pages 30 & 35 AB2(a).*
>
> 107. The BQ relating to the precast units required for the construction of the up and down ramps did not comply at all with the SMM, as firstly, the BQ did not break down the construction of the approach ramp up and the exit ramp down, but instead, lumped the construction of the entire stretch of the approach ramp, the middle parking/drop off area and the exit ramp together. As a result, the pre cast work required in the construction of the up and down ramps was not given separately, and was instead wrongly described on an in situ cast basis. Further, the original BQ did not describe moulds, hoisting, setting, method of fixing and/or bedding and did not provide for the members under the relevant classifications. It is patently clear that the description for the construction of the up and down ramps specifically did not comply with the requirements of the SMM.
>
> 108. Here, it must also be pointed out that initially, DW2 agreed that the drawings issued by the consultant engineer at the tender stage indicated that the ramps were not to be constructed by being cast in situ. *See: Notes of Evidence 16.4.2021, page 16.*

109. Later, however, DW2 changed his testimony to allege that the drawings did provide for construction by being cast in situ, despite the fact that the relevant drawing clearly depicts the use of proprietary pre cast box girders. *See: AA9, page 2120*

110. This is reinforced by the fact that the original BQ does not describe at all the various elements involved in constructing the girders to be cast in situ, for example, the stressing or tensioning of rebar for the box girders. In fact, the original BQ did not describe the construction of individual sections, and instead, described and costed the construction of the entire superstructure as 1 item at RM8.2 million, as confirmed by the following exchange in the cross-examination of DW2 ...

See: AB14, pages 23-23, See also: Notes of Evidence 26.4.2021, page 25

111. The Plaintiff's claim is only in respect of the approach ramp up and the exit ramp down, where the Plaintiff advised the Defendant that the cost of constructing the ramps using a proprietary pre-cast system would have ballooned to RM2,555,034.00, in its letter dated 10 June 2011 to the Defendant. By using 'U' channel beams and the decking system proposed by the Plaintiff, the Defendant would only have to incur a lump sum cost of RM1,200,000.00 for the ramp construction, leading to a saving of RM1,355,034.00 for the Defendant. It is this cost of RM1,200,000.00 that the Plaintiff is claiming as a variation item. *See: AB5, pp 105–108*

112. It is submitted that if the Defendant had followed the SMM in preparing the BQ for the approach and exit ramps, and if the Defendant had provided separately for moulds, hoisting, bedding, pre-tensioning or post-tensioning, the cost of the said ramps alone would have come up an additional RM2,095,132.00 as calculated by Plaintiff. *See: AB5, pp 107*

113. By its letter dated 14 June 2011, the Defendant accepted the Plaintiff's proposal knowing full well the cost as quoted by the Plaintiff expressly stating that in consideration of the time factor and the cost, the Defendant had no objections to the alternative design proposed for the ramps and only required that the Plaintiff's detailed drawings meet the specification and approval of the Defendant's consultants, which they did. *See: AB5, p 104*.

114. PW2 further confirmed that the Defendant had agreed to the Plaintiff's alternative design due to the cost saving to the Defendant, and that such design met the specifications and approval of the Defendant's consultant engineers. PW2 further confirmed that all issues relating to design and cost, including the alternative design for the ramps as proposed by the Plaintiff would have been discussed in the Defendant's management meetings and would have been minuted. The Defendant did not produce the minutes of the management meetings at trial. *See: Notes of Evidence 14.8.2020, pages 20-21*

115. PW3 concluded that based on the lack of any objection from the Defendant to the Plaintiff's proposal of a lump sum cost of RM1,200,000.00 for the Approach up and Exit down ramps, and as the said sum did not form part of the re-measured items in the Defendant's assessment, the sum of RM1,200,000.00 is payable as a separate item for the up and down ramps. *See: Paragraph 55, page 15 PER 2*

116. Based on the Defendant's approval as referred to above, the Plaintiff incurred the cost and expense of constructing the ramps using the 'U' channel beams instead

of the more expensive pre-cast box girders. As such, the Plaintiff submits that the Defendant is estopped from now denying that it had approved the alternative design proposed by the Plaintiff, at the quoted cost of RM1,200,000.00, despite gaining a saving of approximately RM1.4 million as a result. See: *Boustead Trading (1985) Sdn Bhd v Arab Malaysian Merchant Bank Berhad* [1995] 3 MLJ 331*, Tab C PBA*

117. The Defendant may seek to argue that the sum of RM1,200,000.00 has already been paid to the Plaintiff as part of the total cost of the superstructure, based on the alleged re-measurement for the superstructure quantities, resulting in a difference of approximately RM1,200,000.00. *See : AB14, page 28 item B.*

118. The Plaintiff submits that the difference from the original BQ value of RM3,323,194.00 to RM4,529,658.60 in the alleged re-measurement relates to other items, not including the approach and exit ramps, for example, the change in the floor beam design for the curbside, including the drop off area where the original design cost approximately RM160,000.00 but as a result of the changes, the cost increased to more than RM900,000.00. This item, together with other items for the centre drop off/waiting area portion is in fact what led to the increase of approximately RM1,200,000.00 which appears in the alleged re-measurement. *See: AB14 page 23, for example item G*

119. The original design for the centre drop off/waiting area provided for fewer floor beams to cater for longer slabs of 14m span with a thickness of 500mm, which were too heavy to install in a brown field airport. *See: AB11 page 55*.

120. The Plaintiff therefore engaged its own professional engineer to propose a change in design to slabs of 7m and 10m length with 205mm and 265mm thickness, which required more intermediate beams, and this change in design was accepted by Defendant. *See: AB 11 page 31-32 See also: AB 9 page 213*

121. However, the purported 're-measurement' by JBA in the draft Final Account of the slabs used in the centre drop off/waiting area still refers to slabs of 500mm thick slab although no such slabs were used in the actual construction of the centre drop off/waiting area. *See: AB14, page 23 Item X.*

122. Obviously therefore, JBA did not carry out any re-measurement of the centre drop off/waiting area based on the drawings, and it is submitted once again that the figures appearing in the draft Final Account, which have purportedly been derived from a process of re-measurement, are unreliable, arbitrary and without any basis.

123. In the premises, the Plaintiff submits that the claim for the sum of RM1,200,000.00 in respect of the up and down ramps has been established on a balance of probabilities.

[160] In opposing this variation claim on approach ramp, the defendant took the position that the plaintiff is not entitled to this claim as: (i) there is no valid instruction pursuant to cl 24(a) of the main contract to carry out these works; (ii) the approach ramp is part of the plaintiff's original scope of works; (iii) the alternative design has been taken into account in the draft FC valuation; and (iv) the plaintiff has failed to adduce evidence that it has incurred sums to carry out these works.

[161] In paras 211–221 of the defendant's written submissions, the defendant submitted as follows:

There is no valid instruction pursuant to Clause 24(a) of the main contract

211. The basis of the Plaintiff's claim is that it had proposed an alternative design using 'U' channel beams and a decking system, which led to a saving of RM1,355,034.00 for the Defendant, compared to the original design which involved a proprietary pre-cast system and the construction of box girders *[WS-PW1/34]*. The Plaintiff also relies on the following correspondence:

(a) Letter dated 10.6.2011 from the Plaintiff to the Defendant's Project Manager wherein the Plaintiff proposed an alternative design for the approach and exit ramp for the Project which would amount to RM1,200,000.00 *[AB5/105]*; and

(b) Letter dated 14.6.2011 from the Defendant's Project Manager to the Plaintiff wherein the Defendant stated that it had no objections to the alternative design proposed by the Plaintiff *[AB5/104]*.

212. However, the Defendant submits that these correspondence do not amount to a valid instruction by the Defendant to the Plaintiff to carry out the alternative design for the approach ramp.

The approach ramp is part of the Plaintiff's original scope of works under the main contract

213. With regard to (i), the approach and exit ramps are part of the original scope of the main contract works. Specifically, the approach and exit ramps are part of the Curbside Expansion (Bill E.1) of the main contract. This is not disputed by PW1 *[NOP/2/29]*: ...

214. It is the Defendant's position that whilst the alternative design of the approach ramp was not objected to by the Defendant, the Plaintiff is not entitled to claim any additional sums for the same as the construction of the approach ramp is part of the original scope of the main contract works.

215. Further and in any event, if in fact the Plaintiff had constructed the approach ramp using the alternative design, which it contends would have resulted in a saving of RM1,355,034.00, then it ought not to be claiming for any additional sums at all.

The alternative design has been taken into account in the main contract Draft FC

216. It is the Defendant's position that the Defendant has taken into account the construction of the approach and exit ramp and the alternative design thereto in the main contract Draft FC.

217. In the main contract Draft FC, the Defendant's assessment and valuation of the Curbside Expansion works is RM8,355,464.30 (without piling works), which is more than the original contract sum of RM6,500,464.20 *[AB14/28]*. A breakdown is as follows:

ITEM	BQ REF.	DESCRIPTION	UNIT	RATE	CONTRACT PROVISION/OMISSION		REMEASUREMENT/ADDITION	
					QUANTITY	AMOUNT (RM)	QUANTITY	AMOUNT (RM)
		SUMMARY						
A		Substructure	-	-	-	1,153,085.80	-	982,787.80
B		Superstructure	-	-	-	3,323,194.00	-	4,529,658.60
C		Retaining wall	-	-	-	306,273.40	-	306,273.40
D		Railing And Guard Rail	-	-	-	153,940.00	-	248,740.00
E		Wall and Floor Finishes	-	-	-	651,687.00	-	1,751,548.00
F		Ceiling Finishes	-	-	-	730,080.00	-	313,356.00
G		Drainage	-	-	-	100,808.00	-	100,808.00
H		Pavement	-	-	-	81,366.00	-	122,293.50
		BILL NO. E.1.0 - STURCTURE & FINISHES WORKS TOTAL CARRIED TO BILL SUMMARY			RM	6,500,464.20	RM	8,355,464.30

The Defendant's assessment and valuation is further detailed in 'Disputed Claim No. 2 — Remeasurement of Bill No. E.1: Curbside Expansion' *[AB15/601]* and it is evident from this document that the Defendant has taken into account the Plaintiff's alternative design in its valuation:

The Defendant has taken into account the alternative design by the Plaintiff in the sum of RM7,300,00.00 based on the Plaintiff's letter dated 11.5.2011 *[AB15/604]*:

6.1 REMEASUREMENT OF BILL NO. E.1 : CURBSIDE EXPANSION

COMPARISON COST

ITEM	DESCRIPTION	Original BQ (RM)	Alternative Design by SPASB (FM)	Consultants (Remeasurement) (RM)	SPASB (Remeasurement) (RM)
1.0	Piling Works	1,711,899.00		1,445,496.00	1,445,496.00
2.0	Sub-Structure	1,153,085.80	7,300,000.00	982,787.80	1,403,345.20
3.0	Superstructure	3,323,194.00		4,529,858.60	5,084,413.40
4.0	Retaining Wall	306,273.40		306,273.40	564,419.40

The Defendant's assessment based on this alternative design is valued below, and when compared to the figures in the main contract Draft FC above, evidently demonstrates that the Defendant has taken into account the Plaintiff's alternative design [AB15/605]:

Comparison on Disputed Item of Remeasurement Bills

Item	Description	Contract Provision	Remeasurement by Consultant	Remeasurement claim by SPASB (10 Mac 2015)	Amount Difference/Disputed	Justification/Remark
	Wall No. E.1 - Curbside Expansion					
1.0	Substructure	1,153,085.80	982,787.80	1,403,345.20	420,557.40	a. A Saving on excavation @ RM3,834.00 b. Additional on blinding @ RM3,894.40 c. Additional on concrete @ RM104,400.00 d. Additional on reinforcement @ RM295,449.00 e. Additional on formwork @ RM20,658.00
2.0	Superstructure	3,323,194.00	4,529,658.60	5,084,413.40	554,754.80	a. A saving on concrete G40 @ RM242,786.70 b. Additional on concrete G35 @ RM128,180.00 c. Additional on reinforcement @ RM668,349.00 d. Additional on BRC A10 & A7 @ RM23,831.50 e. Additional on formwork @ RM37,180.00
3.0	RC Retaining Wall	306,273.40	306,273.40	564,419.40	258,146.00	a. Additional on concrete G40 @ RM300.00 b. Additional on reinforcement @ RM234,438.00 c. Additional on formwork @ RM6,393.00 d. Additioni of sand backfill @ RM17,105.00
	Total	4,782,553.20	5,818,719.80	7,052,178.00	1,233,458.20	

218. This has also been confirmed by the Defendant's expert in his expert report and the joint report between the experts *[DER-1/25]* and *[JER-2/10]*.

The Plaintiff has not adduced evidence to prove that the sum has been incurred

219. It is the Defendant's position that the Plaintiff has failed to adduce evidence of the sum of RM 1,200,000.00 having been incurred. The Plaintiff's expert is also unable to justify the additional sum claimed with a cogent basis either through his reports or during the hot-tubbing session.

220. This has also been established during cross-examination of PW1 *[NOP/2/29]*: ...

221. Based on the above reasons, the Defendant submits that the Plaintiff is not entitled to any additional sums in relation to the approach ramp as this has been included in the main contract Draft FC.

[162] In respect of the defendant's argument on SO's written instruction, the plaintiff has repeated its submission in paras 129–131 of the plaintiff's reply submission reproduced as follows:

129.The manner in which this Project was managed by the Defendant reflects a failure on the part of the Defendant in respect of the formalisation of instructions on many occasions as noted above.

130. It must be remembered that in respect of the agreed sum of RM12,504,205.68, some of the variation items constituted within the 176 agreed items are also unsupported by written instructions from the SO but have been agreed upon and have been recommended for payment by JBA. In respect of some of the variation items claimed for, the Plaintiff has adduced written quotations issued by the Plaintiff to the Defendant, which have been acknowledged by the Defendant and in respect of which the Plaintiff has carried out the relevant variation works and the Defendant has obtained the benefit of such works. As confirmed by

PW2, all works carried out by the Plaintiff were discussed in management meetings and minuted before the Plaintiff was allowed to proceed with the works, such that if the Plaintiff proceeded with works, such works would already have been approved. The Defendant did not tender minutes of management meetings during the course of the trial. *See: WS PW1, Q&A 90 AB6 and AB7 See also: Notes of Evidence 13.8.2020 pages 45 to 46, Notes of Evidence 14.8.2020, page 23 and Notes of Evidence 14.9.2020 pages 16–18*

Notes of Evidence 13.8.2020 pages 45 to 46

PC: You mentioned that during the works, it turned out that some of these designs were not suitable for site condition. Who discovered this?

PW(2): It was discovered after the contractors took the site possession. It was discovered by the main contractor. After that, this issue was highlighted to our side. It was then discussed many times during management meeting and site meeting.

PC: You mentioned management meetings, Mr Fadil. Who attended this management meetings?

PW(2): Management meeting is attended by everybody except contractor because COO, Dato Arif, our SO Ir Abdul Nasir and all the team of consultants.

PC: You mentioned that COO is Dato' Arif. Dato' Nasir what was his ...

PW(2): At the time, Dato Nasir was a senior manager and the SO.

PC: You mentioned Mr. Nor Ashikin. PW(2): Nor Ashikin is the senior manager PC: And all the consultants?

PW(2): All the consultants.

PC: How often was this management meeting held?

PW(2): The management meeting was held every month and the submission is held every fortnight.

PC: So for both these meetings, were minutes taken?

PW(2): Yes. All minutes are taken.

PC: While we're still on these subject of design issues where it was found that some designs were not suitable for site condition. Did this kind of issues arose during the works and did the defendant's consultants provide a solution for these issues?

PW(2): Normally, the consultants will discuss with the contractors during the site meeting and ask the contractors to come up with a proposal.

PC: And would this proposals be discussed at the management or site meetings?

PW(2): Paperwork and site works accepted by the defendants are discussed in the management meeting and all discussions are minuted before they are allowed to proceed with the work.

PC: So, would it be correct that if the contractor proceeded with the work, it has already been approved?

PW(2): Yes. Approved.

Notes of Evidence 14.8.2020, page 23

PC: Can you just refer to 2 bundles, Encik Fazil, AB6 and AB7? Now, can you just look generally at the documents AB6 and AB7. These quotations that were sent by Syarikat Pembinaan Anggerik to Malaysia Airport.

PW(2): Which page?

PC: You just look generally. You can look at page 1, for example, AB6. Would you have received the documents at page 1?

PW(2): Yes.

PC: You see there's a notation on page 1. Who's handwriting is that?

PW(2): It is my handwriting. PC: What is your notation?

PW(2): I write to my executive, Encik Farhan, please clarify with Azhar and Anuar are the consultants. By right, he is helping in taking care in the (inaudible) for this is a ID contract.

PC: Was there any response from JBA or (inaudible), as far as you are aware?

PW(2): This is a long time ago. Any letter

PC: I don't think it's in the bundle. You don't remember this particular quotation? If you can't remember you, it is alright. Can I refer you to one particular example? Let say AB7, Encik Fazil. Page 530. This is a quotation dated 11 January 2012 for structural works that (inaudible). And there's a attached table with a figures at page 531. Did you receive this letter?

PW(2): Yeah.

PC: As far as you remember, did the SO dispute this figure?

PW(2): No, actually this one instructed by Dato Hamid.

PC: This particular item?

PW(2): Yes, this particular figure item. Because every month winds up with the SO. So, this is one of the items that instructed by him.

131. It is therefore unconscionable for the Defendant to now deny liability for such variation works on the grounds that the Plaintiff has not produced the relevant written instructions of the SO, and the Defendant ought to be estopped from denying liability for such works. See: *Boustead Trading (1985) Sdn Bhd v Arab Malaysian Merchant Bank Berhad* [1995] 3 MLJ 331*, Tab C PBA See also: Ho Weng Leong v Ng Kee Chin* (supra).

[163] This court accepts the plaintiff's submission that from the facts and circumstances relating to the conduct and the manner of contract

administration by the defendant in this project, the defendant-employer is estopped from insisting that a variation work must be formalised by way of the SO's written instruction. In this project, the SO has also delegated many functions of the SO to the consultants and other project staff of the defendant. This court agrees with the plaintiff that where a variation is approved or instructed at a management meeting or site meeting chaired by the SO or the SO's representative at the meeting or is approved or authorised by a letter or document of a consultant or a project staff delegated or authorised by the SO, it constituted sufficient authorisation of the variation work binding upon the defendant in the circumstances of this project.

[164] In reply to the defendant's other arguments on the approach ramp, the plaintiff in paras 189–198 of the plaintiff's reply submissions submitted as follows:

> *Paragraphs 213–215*
>
> 189. By way of an initial response, see paragraphs 104 to 116 of the Plaintiff's Submissions.
>
> 190. Respectfully, the Defendant is obfuscating the position regarding the extra cost of the approach and exit ramps. As a result of the wrong description for the construction of the approach and exit ramps in the BQ, the actual price reflected in the BQ would have ballooned to RM2,555,034.00 if the works were properly proceeded with, and not as otherwise provided for in the incorrect BQ.
>
> 191. By the alternative design proposed by the Plaintiff at a lump sum cost of RM1,200,000.00, the Defendant would clearly have saved EM1,355,034.00 out of that ballooned cost of RM2,555,034.00. That is the saving of RM1,355,034.00 referred to by the Plaintiff. It is disingenuous for the Defendant to suggest that as a result of such saving, the Defendant does not have to pay the RM1,200,000.00 to the Plaintiff. Effectively, the Defendant is seeking to obtain the re-designed approach and exit ramps for free, which is unconscionable.
>
> *Paragraphs 216-218*
>
> 192. By way of an initial response, see paragraphs 117 to 123 of the Plaintiff's Submissions.
>
> 193. The Defendant has not included the additional sum of RM1,200,000.00 in its draft final account. What has been included in the draft final account is only the additional cost incurred as a result of the change to the design of the central drop off/waiting area, where the original design provided for fewer floor beams catering for longer slabs, which were too heavy to install in the live airport. Even then, JBA has obviously not re-measured the revised quantities, as the draft final account still refers to the quantities as per the original BQ, which were not installed at site.
>
> 194. At its own cost, the Plaintiff proposed a change in design to slabs of 7m and 10m length with reduced thickness, which therefore required more intermediate beams, which naturally cost more. This proposal was accepted by the Defendant and the changed varied quantities were installed by the Plaintiff for the central drop of/waiting area, which led to the price difference in the draft final account. The price

A difference does *NOT* reflect the cost of the changed design of the approach and exit ramps.

195. Specifically in reply to paragraph 217, firstly, there is no letter dated 11 May 2011 issued by the Plaintiff. The letter is dated 10 June 2011. *See: AB5, pages 105–108*

B

196. Secondly, by its letter dated 10 June 2011, the Plaintiff did not propose a lump sum figure of RM7,300,000.00 for the piling works, sub-structure, super structure and retaining wall related to the Curbside Expansion. The Plaintiff's letter dated 10 June 2011 was confined to the approach and exit ramps only, and the Plaintiff proposed a lump sum cost of RM1,200,000.00 as opposed to the additional cost of C RM2,555,034.00 which would have to be incurred by using the proprietary pre-cast box girder system as reflected in the relevant drawings. *See: AB5, pages 105-108, See also: AA9, page 2120*

197. Clearly, the Defendant has not incorporated the lump sum additional cost of RM1,200,000.00 for the approach and exit ramps only anywhere in the draft final D account, and this sum has not been taken into account by the Defendant's Expert. The Defendant's Expert has erroneously concluded that the lump sum cost of RM1,200,000.00 has already been included in the purported re-measurement. This has been demonstrated to be incorrect. *See: JER 2, page 10*

Paragraphs 219–221

E

198. The Defendant accepted the Plaintiff's quotation on a lump sum basis, and the work has been carried out. PW2 confirmed that all issues relating to design and cost, including the alternative design for the approach and exit ramps, would have been discussed in management meetings of the Defendant and would have been minuted. The minutes of management meetings were not produced at trial by the F Defendant. *See: Notes of Evidence 14.8.2020, pages 20–21.*

[165] In the circumstances of the present case, this court finds that (a) there was an error or anomaly in the BQ description of the entirety of the approach ramp works as *in situ* construction works in the construction of this live airport G project when the drawings showed that the construction would have to be by way of a proprietary pre-cast box girder system as it would have required the construction of box girders which are pre-cast fabrications based on a proprietary specialist system. The dimensions of the box girder as indicated in the drawings, inter alia, with a span of more than 10 meters in width, as well as H the fact that the drawings required a suspended system resting on the columns upon flexible joints with bearings obviously require proprietary pre-cast system, as it would have been physically impossible to construct a suspended system of that nature to be cast *in situ.* By the nature of casting works, the *in situ* construction of reinforced concrete box girders (similar to box girders in the I LRT projects and RT projects) would require the use of steel moulds and concrete vibration system at the site, a temporary casting yard to house the steel mould together with crane facility for lifting the cast segments at the project site and a working space of significant size. The defendant has not shown where in this live airport under construction could there be sufficient working space

for such *in situ* casting of reinforced box girders at the airport site. It was in such space constraint and under such physical impossibility of *in situ* construction of the reinforced box girders that the defendant's consultant approved the plaintiff-contractor's alternative design proposal of using 'U' channel beams and the decking system in place of the originally-specified design of box girders.

[166] In the circumstances, this court has held that the contractor's alternative design of 'U' channel beams and the decking system is a variation.

[167] In opposing the plaintiff's claim for this variation, the defendant alleged that this cost of RM1.2m for the 'U' channel beams and the decking system in the approach ramp has been included in the CQS's valuation in the draft final account. He who alleges must prove.

[168] At the trial, none of the plaintiff's witness has specifically proved that this cost of RM1.2m for the 'U' channel beams and the decking system in the approach ramp has been included in the CQS's valuation in the draft final account.

[169] The defendant argues that in the main contract draft FC, the defendant's assessment and valuation of the curbside expansion works is RM8,355,464.30 (without piling works), which is more than the original contract sum of RM6,500,464.20 (AB14/28) and cross-refers to a general summary on valuation of the curbside expansion works at RM8,355,464.30 but none of the items in the general summary shows the inclusion of RM1.2m for the 'U' channel beams and the decking system in the approach ramp.

[170] On the part of the plaintiff. It is argued that: (a) what has been included in the draft final account is only the additional cost incurred as a result of the change to the design of the central drop off/waiting area, where the original design provided for fewer floor beams catering for longer slabs, which were too heavy to install in the live airport; and (b) at its own cost, the plaintiff proposed a change in design to slabs of 7 meter and 10 meter length with reduced thickness, which therefore required more intermediate beams, which naturally cost more. This proposal was accepted by the defendant and the changed varied quantities were installed by the plaintiff for the central drop of/waiting area, which led to the price difference in the draft final account. See *AB 11 pp 31–32* and also *AB 9 p 213.* The price difference does NOT reflect the cost of the changed design of the approach and exit ramps; and (c) the plaintiff submits that the difference from the original BQ value of RM3,323,194 to RM4,529,658.60 in the alleged re-measurement relates to other items, not including the approach and exit ramps, for example, the change in the floor beam design for the curbside, including the drop off area where the original design cost approximately RM160,000 but as a result of the changes, the cost

increased to more than RM900,000. This item, together with other items for the centre drop off/waiting area portion is in fact what led to the increase of approximately RM1.2m which appears in the alleged re-measurement. *See: AB14 p 23, for example item G*.

[171] In order to specifically prove that the RM1.2m for the 'U' channel beams and the decking system in the approach ramp has been included in the CQS's re-measurement in the draft final account valuation, this court would expect the defendant's witnesses, especially the CQS and the defendant's expert to show the detailed breakdowns of the draft final account on the curbside expansion and point out the specific items and subitems which allegedly are in respect of RM1.2m for the 'U' channel beams and the decking system in the approach ramp. However, the defendant's witnesses have neglected to do so. Neither has the defendant's counsel in cross-examination confront the plaintiff's witnesses with the specific items and subitems in the CQS's draft final account which allegedly are in respect of RM1.2m for the 'U' channel beams and the decking system in the approach ramp.

[172] In the circumstances, this court finds on a balance of probabilities that the defendant has failed to prove its allegation that the value of RM1.2m for the 'U' channel beams and the decking system in the approach ramp has been included in the CQS's draft final account.

[173] In the plaintiff's letter dated 10 June 2011 to the defendant proposing the use of 'U' channel beams and the decking system as alternative design, the defendant would only have to incur a lump sum cost of RM1.2m for the ramp construction: *AB5, pp 105–108*. As the plaintiff's alternative design of 'U' channel beams and the decking system was approved and accepted by the defendant without any dispute of the costs, this court finds that the reasonable costs of constructing the alternative design works on 'U' channel beams and the decking system at the approach ramp is RM1.2m. In the premises, this court allows this variation claim in the amount of RM1.2m for the 'U' channel beams and the decking system in the approach ramp.

Cement screed

[174] The plaintiff claims the sum of RM676,509.90 for the tiles laid onto 30,750.45m2 of bare concrete floor, which involved using cement screed, instead of onto existing tiles. The basis of the plaintiff's claim is that the bill of quantities does not provide a separate item for cement screed although the SMM requires the same to be provided separately *(WS-PW1/36)*. The plaintiff also contends that the bill of quantities has been described incorrectly in that the description of 'c/w cement screed' refers to tile adhesive or backing and not screed.

[175] In paras 124–130 of the plaintiff's written submissions, the plaintiff submitted as follows:

> 124. The Plaintiff's claim for the item Cement Screed relates to the laying of floor tiles on to existing concrete flooring which has not already been tiled mainly in the MTB area, as indicated in the relevant drawings. *See: Pages 119–124 AB5.*
>
> 125. In the provisional BQ, a difference is drawn between floor tiles laid on to existing floor tiles and floor tiles laid on to new or existing concrete flooring. For example, in respect of Bill E.5.A/1R (Floor finishes), the description relates to MML or equivalent tiles laid on to existing floor tile c/w cement screed. In fact, it is submitted that the description of c/w (or complete with) cement screed in such circumstances is incorrect, and should instead refer to tile adhesive or backing, as screed actually refers to a thin layer of cement paste and sand which is laid on to concrete floor to act as smooth levelling surface before laying the floor tiles with cement adhesive or backing. Tile adhesive is what would normally be used to lay floor tiles on to existing floor tiles, as described in Bill E.5.A/1R. Cement screed is therefore not required where tiles are being laid on to an existing floor, as the floor would already have been levelled. *See: WS PW1, Q&A 81 See also: AB5, p 113.*
>
> 126. In Bill E.5.A/2R on the other hand, describes laying floor tiles on to new floor where the description refers to tiles which are '*laid direct onto existing floor, tile or onto new cement screed.*' (Emphasis added.).
>
> 127. DW2 confirmed in cross-examination that the BQ was prepared by the Interior Designer, who was not called as a witness. *See: Notes of Evidence 26.4.2021, page 35*
>
> 128. The Plaintiff's claim is in respect of tiles laid onto 30,750.45 m2 of bare concrete floor and not onto existing floor tiles, which amounts to RM676,509.90. The provisional BQ does not provide a separate item for cement screed, although the SMM requires cement screed to be described separately in such circumstances, where pavings laid directly on hardcore or existing concrete shall be given separately. *See: AB2(a) page 46, item 4(b)*
>
> 129. PW3 concurred with the Plaintiff's position that with regard to the laying of tiles directly on to plain concrete slab flooring, cement screed is payable as a separate item. *See: Paragraphs 56-57, pages 15–16 PER 2*
>
> 130. In the premises, the Plaintiff submits that the claim in respect of cement screed in the sum of RM676,509.90 has been established on a balance of probabilities.

[176] In opposing this variation claim, the defendant takes the position that the plaintiff is not entitled to its claim for additional sums relating to cement screed because: (i) there is no valid instruction pursuant to cl 24(a) of the main contract; (ii) the cement screed has been included in the bill of quantities; (iii) the plaintiff has failed to adduce evidence to demonstrate that the tiles were in fact laid on a bare concrete floor; and (iv) the plaintiff has failed to adduce evidence to prove that the sums have been incurred.

[177] Bill E.5.A/1R in the Contract bills of quantities expressly provide for the 'existing floor tile c/w cement screed' *(AA4/866 to 8700. AA4/867–868*

item A is described as 'Supply and install MML or equivalent porcelain full body homogenous tile with decorative pattern and floor pattern at kiosk stand square shape pattern, round shape pattern and star shape pattern area to be laid direct onto existing floor tile *c/w cement screed*, approved adhesive and tinted event joint including to hack existing floor tile to lay slope, new floor tile to match level existing floor tile (wherever necessary) consist of '[various types of tiles] for which the plaintiff priced for the tile materials 'to be laid at (i) Existing Arrival concourse and corridor at Level 1; (ii) Existing International Baggage claim area and corridor at Level 1; (iii) New Domestic Baggage claim area and corridor to new surau; (iv) New Domestic GA passenger waiting lounge at Leval 1; (v) Existing Departure concourse and check-in counter lobby at Level 2; and other existing areas and new areas. In respect of the price for the tiling works at both the existing areas and the new areas, the plaintiff priced every of these items at the same rate of RM150.00 per m2 irrespective of location and irrespective of whether it is new area or existing area. In light of such identical pricing for the new areas and existing areas for the tiling works, the plaintiff cannot argue that it has allegedly neglected to price for the cement screed at certain type of the areas or at some of the locations.

[178] This court agrees with the defendant that interpreting the relevant bill, it is evident from the provisions of Bill E.5 (floor finishes) of the bill of quantities that cement screed has been included.

[179] On this ground alone, it is sufficient for this court to hold that cement screed is for tiling works is not a variation.

[180] Moreover, there is a general provision in the conditions of contract that any ancillary work necessary for the execution of the contract work is deemed to be included in the price for the contract work. Laying new floor tiles onto a floor slab with existing floor tile would necessarily require proper bonding between the existing layer and the new layer of new tiles. In the contract bills of quantities, the chosen method of achieving the bonding between two layers is cement screed, hence the supply and lay of new tiles is described as 'c/w cement screed'.

[181] Further or alternatively, this court accepts the defendant's submission that the plaintiff has not proved the quantity of the floor area allegedly involved in laying new tiles onto the existing floor tiles in this project.

[182] As the Bill E.5.A/1R in the contract bills of quantities expressly and specifically provides for this item on cement screed for floor tiles, there is no room for the plaintiff to rely on SMM insofar as it relates to cement screed for laying floor tiles. See also para 143 above.

[183] In the circumstances, this court rejects the plaintiff's variation claim for cement screed. A

Aluminium glass frame

[184] In respect of aluminium glass frame, the plaintiff in paras 131–137 of the plaintiff's written submissions submitted as follows: B

> 131. The Plaintiff's claim for the sum of RM318,600.00 in respect of aluminium glass frames is based on what the Plaintiff submits is the more appropriate rate for the installation of glass panels. The provisional BQ provides 2 different rates for the installation of glass panels, 1 based on numbers of overall composite panels with the rate expressed as a per composite panel rate and 1 based on a m2 description at the rate of RM330 per m2. Here, the Plaintiff was required to install composite panels of extra large dimensions, which were described by reference to the number of such composite panels and their overall size, but which were comprised of smaller individual panels, each with its own components/accessories. This could have easily been confirmed by the Architect, if he had been called as a witness during the trial. C D
>
> 132. At Bill No. E.3.B, items B-H, the description is of large composite panels measuring up to 39m wide by 4.5 m high (item H). Such panels as installed by the Plaintiff were composite panels made up of smaller panels, particularly panels measuring 2m by 1m. *See: AA3, p.778, See also:WS PW1 Q&A 82* E
>
> 133. Therefore, the most accurate means of pricing the individual panels supplied to make up the much larger composite panels installed would be by reference to the m2 measurement, rather than by reference to panels measuring 39m by 4.5m. This is due to the fact that a description of a panel of such size does not take into account the individual components of sub-frames, mullions, transoms, brackets, bedding frames and other fixing accessories for the individual panels which make up the composite panel. Those items are instead included in the description based on a m2 description, for example at Bill No. E.2.B, item B. *See: AA3, p. 836* F
>
> 134. *DW2 attempted to distinguish between curtain walling and external cladding, arguing that the Plaintiff installed curtain walls and not cladding and therefore the rate applied by the Defendant was the correct rate. See: Notes of Evidence 26.4.2021, page 44* G
>
> 135. However, it is apparent that the Plaintiff installed glass curtain walls and that the m2 rate sought to be applied by the Plaintiff is in fact applicable to glass curtain walls and not to cladding. As such, it is submitted that the Plaintiff is entitled to apply the m2 rate, which is the more appropriate rate as it also provides for the components/accessories installed for each individual panel which made up the larger composite panel. *See: AA3, p. 836* H
>
> 136. PW3 concurs with the view that confusion arose due to the existence of 2 different rates for glass curtain walls in the BQ, and that the correct rate to be applied is the m2 rate, which properly describes the individual components installed together with the panels. *See: Paragraphs 65–66, page 18 PER 2* I
>
> 137. In the premises, the Plaintiff submits that the claim in respect of aluminium glass framing in the sum of RM318,600.00 has been established on a balance of probabilities.

[185] In opposing this claim, the defendant submitted that it is the defendant's position that the plaintiff is not entitled to this claim because: (i) there is no valid instruction pursuant to cl 24(a) of the main contract; (ii) the higher rate in the bill of quantities relied upon by the plaintiff is an afterthought; and (iii) the plaintiff has failed to adduce evidence to demonstrate that the additional sum has been incurred.

[186] As the revised works on aluminium glass frame was shown in the construction drawings, carried out under the supervision of the defendant's representative and eventually accepted by the defendant, it is now not open for the defendant to argue that such revised works were in any way unauthorised by formal written instruction or unacceptable.

[187] This court agrees with the plaintiff's submission and evidence that more individual panels supplied and installed to make up the much larger composite panels involved more individual components of sub-frames, mullions, transoms, brackets, bedding frames and other fixing accessories for the individual panels which make up the composite panel and also more labour input in the installation of component panels.

[188] This court agrees with the plaintiff that the revised work on aluminium glass frame should be valued on per m2 basis similar to Bill E.2.B (building works).

[189] In the premises, this court accepts the plaintiff's submission that RM330/m2, the higher of the two priced BQ rates, should be used for the revised aluminium glass panels in small panels instead of RM230/m2 derived from the fixed price for the larger panels.

Repairing and upgrading work at Jalan Garuda

[190] In respect of this claim for repairing and upgrading work at Jalan Garuda, the plaintiff in paras 139–151 of the plaintiff's written submissions submitted as follows:

> 139. By way of background, Jalan Garuda was a service road used mainly by trucks delivering cargo to the airport. The condition of the road was poor and had numerous pot holes. As early as December 2010, the Plaintiff was asked by the Defendant to carry out upgrading works to Jalan Garuda, as confirmed by PW2 as the COO of the Defendant had complained about the condition thereof. In preparing for the said upgrading works, the Plaintiff proposed a new lorry waiting area at Jalan Garuda and subsequently carried out a California Bearing Ratio test on Jalan Garuda. *See: AB16, pp 41–46 See also Notes of Evidence 14.8.2020, page 21.*
>
> 140. In May 2012, the Plaintiff was requested to relocate an underground main water pipe running across Jalan Garuda due to the construction by the Plaintiff of

a new water tank adjacent to Jalan Garuda, as confirmed by PW2. *See: AB16 page 47, See also AB11, p. 70 and Notes of Evidence 14.8.2020 page 22.*

141. Due to the fact that there were underground services cables located above the pipe to be relocated, the Plaintiff was also requested to relocate such underground services. Such works required the excavation of the relevant portion of Jalan Garuda by the Plaintiff.

142. The Plaintiff provided a quotation on 11 July 2012 for the re-location of underground services at Jalan Garuda at the cost of RM16,120.00, which the Defendant accepted. *See: AB11, pages 71–72.*

143. The Plaintiff therefore commenced the relocation of the underground services and the main water pipe in July 2012. The variation in respect of the relocation of underground services was eventually claimed by the Plaintiff and paid by the Defendant under the M&E portion of the works. *See: ABQ44, item 22, page 474.*

144. In the course of carrying out the relocation works, the Plaintiff was verbally instructed by the SO's representative to carry out repair and widening works to Jalan Garuda ('the road works'), as the Plaintiff was already carrying out relocation works in that area, as confirmed by PW2. *See: Notes of Evidence 14.8.2020 page 22.*

145. As such, over the period from December 2010 to December 2012, the Plaintiff carried out various works in relation to Jalan Garuda, including scarifying works, grading works, sand bed and levelling works as well as laying crusher run along Jalan Garuda. As there was no completion date for such works, which were additional works, and as the priority of all parties was the completion of the main construction works, the road works were undertaken intermittently from December 2010 to December 2012. In December 2012, the Defendant wished to formalize the instruction to carry out the road works and by its Consultant Engineer, issued a formal instruction signed by the Resident Engineer En Omar Ahmad (who was not called as a witness) to the Plaintiff to carry out the complete restoration and resurfacing of the entire stretch of Jalan Garuda based on the instructions of the COO of the Defendant. Further to the instruction, the Plaintiff provided a quotation for the road works on 28 December 2012, by which time, a portion of the works had already been carried out by the Plaintiff. *See: WS PW1 Q&A 84, See also: AB11, pp 67–69.*

146. The Plaintiff included the grading, sand bed and levelling works as well as the laying of crusher run in its quotation, as the Plaintiff had already been carrying out such works over the period from December 2010 to December 2012 as noted above. The Plaintiff carried on with such works as instructed by the Defendant, until February 2013 (by which time, the sub-base works had been completed by the Plaintiff), when the Plaintiff was abruptly verbally informed that a third party contractor had been appointed to carry out the premix works only on Jalan Garuda. By then, the Plaintiff had carried out approximately 20% in value of the scarifying, grading, sand bed and levelling works as well as the laying of crusher run, which are items (A) to (D) in its quotation. *See: WS PW1 Q&A 84.*

147. There was no proper termination of the Plaintiff's appointment as contractor to carry out the Jalan Garuda roadworks by the Defendant. The Defendant did not call En Omar Ahmad to clarify the circumstances in which a third party contractor was appointed to carry out the remainder of the Jalan Garuda works, without the

knowledge of the Plaintiff, and without first terminating the instruction to the Plaintiff to carry out the works. PW2 has also confirmed that until the time he left at the end of 2012, he was not aware that the Defendant intended to appoint a third party contractor, and he confirmed that while he was the Project Manager, there were no complaints in respect of the works carried out by the Plaintiff on Jalan Garuda. *See: Notes of Evidence, 14.8.2020, page 22.*

148. *Therefore, the Plaintiff is entitled to claim the full value of its quotation for the road works in the sum of RM1,819,400.00 as loss arising from the improper termination of the Defendant's instruction dated 21 December 2012.*

149. For the purpose of the claim for variation items, the Plaintiff's claim in respect of the Jalan Garuda works is limited to 20% of the total cost of the scarifying, grading, sand bed and levelling works as well as the laying of crusher run (the total cost being RM990,000.00), which represents the approximate amount of roadworks actually carried out by the Plaintiff up to the point of the improper termination, and which amounts to RM198,0000. *See: AB11 p 69.*

150. In addition, the Plaintiff did not claim for the cost of relocating the main water pipe as its earlier claim in respect of re-location of services did not include this item. It is estimated that these works cost RM10,000.00. *See: WS PW1, Q&A 84.*

151. In respect of the balance sum of RM1,621,400.00 being the sum quoted by the Plaintiff in respect of the Jalan Garuda roadworks which quoted sum was not disputed by the Defendant, the Plaintiff is claiming the loss of profit element out of that balance sum as general damages for the improper termination of the Plaintiff's appointment to carry out those works, resulting in loss to the Plaintiff, which naturally arose in the usual course of events from the improper termination of the instruction by the Defendant and which the Defendant knew, when it issued the instruction, would be the likely loss suffered by the Plaintiff as a result of the improper termination. For this purpose, the Plaintiff will submit that a profit margin of 15% out of the quoted sum of RM1,819,400.00 is the industry standard and is reasonable in the assessment of the general damages due to the Plaintiff for the improper termination of the instruction, and the Plaintiff therefore seeks a sum of RM243,210.00 based on the industry-standard profit margin of 15% from the balance quoted sum of RM1,621,400.00, as the loss presumed by law to have been suffered by the Plaintiff in this regard. *See: Section 74, Contracts Act 1950, Tab D PBA, See also: MGG Pillai v Tan Sri Dato Vincent Tan Chee Yioun & Other Appeals* [1995] 2 MLJ 493, *Scandinavian Bunkering (Singapore) Pte Ltd v MISC Bhd* [2015] 3 MLJ 753.

[191] In opposing this claim the defendant submitted that it is the defendant's position that the plaintiff is not entitled to this claim because: (i) there is no valid instructions pursuant to cl 24(a) of the main contract; (ii) there is no evidence that the plaintiff had in fact carried out these works; and (iii) the plaintiff has not adduced evidence to demonstrate that the additional sum has been incurred.

[192] This court accepts the plaintiff's evidence that over the period from December 2010 to December 2012, the plaintiff carried out various works

intermittently in relation to Jalan Garuda, including scarifying works, grading works, sand bed and levelling works as well as laying crusher run along Jalan Garuda pursuant to the verbal site instructions of the defendants site representative and that subsequently in December 2012 the Consultant Engineer, issued a formal instruction signed by the Resident Engineer En Omar Ahmad (who was not called as a witness) to the plaintiff to carry out the complete restoration and resurfacing of the entire stretch of Jalan Garuda based on the instructions of the COO of the defendant. Further to the instruction, the plaintiff provided a quotation for the road works on 28 December 2012, by which time, a portion of the works had already been carried out by the plaintiff. *See: WS PW1 Q&A 84, See also: AB11, pp 67–69.* In the circumstances, this court rejects the defendant's submission on the alleged absence of instruction on Jalan Garuda works.

[193] This court accepts the plaintiff's submission and evidence that by the time the third party contractor was appointed, the plaintiff had done part of the repair and upgrading works at Jalan Garuda up to 20% thereof.

[194] In the circumstances, this court allows this claim at 20% of the total cost of the scarifying, grading, sand bed and levelling works as well as the laying of crusher run (the total cost being RM990,000), which represents the approximate amount of roadworks actually carried out by the plaintiff up to the point of the third party contractor's taking over of the Jalan Garuda works, and which amounts to RM198,000.

[195] As the plaintiff has not produced sufficient evidence of his profit margin (if any) on the Jalan Garuda balance works and the SO has not issued an official award of Jalan Garuda works to the plaintiff, the plaintiff's claim for alleged loss of profit on the balance value of Jalan Garuda works is dismissed.

Summing-up on variations in Package 2 Contract (main contract)

[196] In summary, this court's decisions on the plaintiff's variation claims in Package 2 Works (main contract) are tabulated below:

Categories of VO Claims	Amount in RM	Paragraphs of GOJ
VOs Agreed:		
Recommendation of Progress Claim No 26, as per column CQS Recommendation; 181 Nos of VOs evaluated out of 191 Nos claimed	12,504,295.68	105–111
VOs submitted before practical completion of the Works:		

Sheet piles (cofferdams)	3,000,000	112–124
Movement of piling machine	0	125–134
Bending H-beams	0	135–144
Other VOs recognised but not yet evaluated (balance 34 items)	Included in 'VOs Agreed'	145–150
Subtotal for VOs submitted before practical completion	15,504,295.68	
Additional VOs submitted after draft Final Account:		
Temporary conveyor	316,600	151–156
Approach ramp	1,200,000	157–173
Cement screed	0	174–183
Aluminium glass frame	318,600	184–187
Repairing and upgrading work at Jalan Garuda	198,000	190–195
Subtotal of Additional VOs submitted after draft Final Account:	2,033,200,00	

THE PLAINTIFF'S ACCELERATION CLAIMS IN PACKAGE 2 WORKS

[197] In support of its acceleration claim the plaintiff submitted as follows:

(a) the Package 2 Contract has a single site possession date and a single completion date: paras 215, 222, 223 and 224 of the plaintiff's written submissions;

(b) the defendant elected not to have sectional completion: paras 216–217 of the plaintiff's written submissions;

(c) the defendant was allegedly obligated to deliver site possession of the entire site to the plaintiff on a single date: paras 222–229 of the plaintiff's written submissions;

(d) the plaintiff initially provided the defendant a work schedule based on a division of the site into five main zones but these work sequences could not be implemented in this 'brown field' environment: paras 231–232 of the plaintiff's written submissions;

(e) despite that, the defendant was still unable to deliver the site to the plaintiff in accordance with the work schedule: para 234 of the plaintiff's written submissions;

(f) the plaintiff executed the Package 2 works in a number of zones and handed over the completed works in various zones to the Plaintiff ahead

of the single extended date for completion for the Package 2 Works: paras 235–242 of the plaintiff's written submissions;

(g) the defendant took over the completed zones of Package 2 Works progressively and ahead of the single extended date for completion for the Package 2 Works: paras 243–248 of the plaintiff's written submissions; and

(h) therefore the plaintiff accelerated the Package 2 Works and is allegedly entitled to claim for the alleged acceleration works: paras 249—250 of the plaintiff's written submissions.

[198] In opposing the plaintiff's acceleration claim, the defendant submitted that the plaintiff is not entitled to its claim for the alleged acceleration of works for the following reasons:

(a) the plaintiff's claim for acceleration is without basis and ought to be dismissed at the outset;

(b) the plaintiff has failed to prove that the works under the main contract were in fact accelerated; and

(c) the plaintiff has failed to prove the quantum of its claim for the alleged acceleration costs.

[199] In paras 427–516 of the defendant's written submissions, the defendants has set out in detail the defendant's submissions in opposition to the plaintiff's acceleration claims.

[200] After having considered the defendant's detailed submissions, this court agreed with the defendant that the plaintiff's acceleration claim should be dismissed on the ground of the three reasons as submitted by the defendant, any one reason whereof would suffice to warrant a dismissal of the plaintiff's acceleration claims.

[201] As correctly submitted by the defendant who refers to Chow Kok Fong's textbook, acceleration of works *per se* does not entitle the contractor to claim for acceleration costs against the employer and in order to sustain an acceleration claim, the contractor must prove either: (i) the acceleration of works was in fact instructed by the employer; or (ii) the employer's breach of contract in wrongfully refusing to grant a reasonable extension of time necessitated the contractor's acceleration in order to mitigate or avoid liquidated damages or other contractual losses.

[202] In *Law and Practice of Construction Contracts: Volume 1* (5th ed) at p 666, the learned author Chow Kok Fong described the nature of acceleration

claims as follows:

> [9.346] Acceleration claims are commonly encountered in a number of jurisdictions, in particular, the United States and Canada. The expression 'acceleration of works' refers to situations where additional capital and manpower resources are deployed to increase the pace of activities on site. For example, a contractor who had planned to use two piling crews to drive his bore piles may accelerate his works by deploying additional piling crews together with the additional bore piling rigs. Alternatively, the contract may extend the working hours of the workforce each day beyond that originally envisioned at the time of the contract.
>
> [9.347] The increase in output from the deployment of additional resources – and hence the extent to which the lost time may be recovered – depends on several factors. These include the complexity of the works, the physical conditions on site (in particular whether there is sufficient working space for the additional resources to be optimally deployed), the quality of the additional resources deployed and the particular stage of the project. Frequently, the contractor may have to permit the additional resources to be deployed sub-optimally and, as a consequence, incur higher costs in generating per unit of output.
>
> ...
>
> [9.349] Thus, a contractor's entitlement to claim for loss associated with acceleration of the works will depend on the circumstances under which the acceleration measures were promoted. For convenience, these may be considered under these heads:
>
> (a) Where acceleration is triggered on the initiative of the contractor in order to recover the time lost through culpable delay.
>
> *(b) Where the measures are implemented at the express request (or instruction) of the employer (or his architect or engineer).*
>
> (c) Where, following a dispute relating to a claim for time extension, the contractor decides to accelerate the works to avoid or reduce his liability for liquidated damages or other contractual losses.

[203] In real-life situations in construction projects, a scenario where seemingly 'acceleration' is triggered on the initiative of the contractor in order to recover the time lost through its culpable delay is in substance and reality an attempt by the contractor to mitigate his likely losses which would be occasioned by the contractor's own antecedent breach of obligation or its own antecedent slow progress in construction work, but it is not a real acceleration of construction works as such. A real acceleration of works which is triggered on the initiative of the contractor is one where the contractor is not behind schedule in its progress of construction works but it decides to and implements acceleration measures and successfully completed the construction works ahead of the contractual completion date. There can be various motivations or reasons which makes a contractor to decide to accelerate its works in the real

sense of the word. Examples of such motivations or reasons for contractor-initiated acceleration include: (a) where the contractor has just completed another construction project and finds it financially beneficial to mobilise the other construction team and plant and machinery to the subject project to accelerate the work progress and thereby save overheads and time-related costs in the subject project; (b) where the contractor is expecting to secure another new sizeable construction project soon and would like to complete the subject project ahead of contractual date for completion so as to mobilise the same construction team and plant and machinery it owns to the other new project instead of spending additional money to employ another new team and rent other company's plant and machinery for the new project; (c) where the contractor has assessed that it is financially more advantageous to complete the subject project earlier than the contractual time for completion; (d) where the contractor for the enhancement of its track records wants to expedite the work progress so as to have a significant project completed ahead of contractual date for completion; etc. Hence, as long as the acceleration measures are contractor-initiated or contractor-triggered, there is no basis or ground for the contractor to claim any additional costs of acceleration irrespective of whether or not the contractor in fact succeeds in accelerating the practical completion of the construction works and irrespective of what is the contractor's motivation or reason for undertaking such acceleration measures.

[204] Where the acceleration claim is premised on an instruction by the employer or the SO, the contractor's acceleration claim would be grounded upon the loss and/or expense clause in the contract or, where the variation clause in the contract is very widely worded to cover a change in sequence or duration of work, upon such widely-worded variation clause. The procedure of notice and claim under the express contractual clauses would have to be complied with by the contractor in claiming acceleration costs in such scenario.

[205] Where the acceleration is premised upon the employer's breach of contract in wrongfully refusing to cause the SO to grant a reasonable extension of time which necessitated the contractor's acceleration in order to mitigate or avoid liquidated damages or other contractual losses, the contractor has to specifically plead and specifically prove that:

(a) there were in fact occurrence of delay events which falls within the contractual clause on extensions of time;

(b) the contractor complied with the notice and claim procedure for the applications for extension of time;

(c) in spite of the contractor's fulfilment of (a) and (b) above, the SO wrongfully refused to grant the reasonable extension of time for the excusable delay events;

(d) despite the contractor's notification to the employer of the SO's wrongful refusal and of the need to accelerate works in order to avoid liquidation damages unless a reasonable extension of time is granted, the employer did not do its part in telling or reminding the SO to do the proper certification functions; and

(e) the contractor thereafter proceeded to implement acceleration measures and incurred damages in the form of additional costs and expenses which he would not have to incur if not for the acceleration measures.

[206] In our present case, the plaintiff in para 17 of its amended statement of claim pleaded its acceleration claim for the following specific items:

(a) additional labour/subcontractor costs;

(b) costs of labour/subcontractor costs as a result of stacking;

(c) overtime costs;

(d) productivity loss;

(e) additional plant and equipment cost;

(f) additional supervision cost;

(g) increase in costs of material and material delivery; and

(h) increased overheads costs.

[207] In our present case the plaintiff based its acceleration claim upon an alleged instruction of the defendant and/or the SO and relied upon cl 5(d) of the conditions of the main contract.

[208] Clause 5(d) of the main contract *(AA3/423)* reads as follows:

> 5(d) If in compliance with the S.O.'s instruction aforesaid involves expenses or loss beyond that reasonably contemplated by the Contractor for which the Contractor would not be reimbursed by a payment made under any provision in this Contract, then unless the same were issued owing to some breach of this Contract by the Contractor, the Contractor shall within one (1) month of receipt of such instruction, give notice in writing of his intention to claim for such expense or loss to the S.O. together with an estimate of the amount of such expense and/or loss, subject always to Clause 48(a) hereof.

[209] It is the defendant's submission that in order for the plaintiff to claim for loss and expense arising from alleged acceleration of works under cl 5(d), the plaintiff has to firstly provide evidence of an instruction from the SO in accordance to cl 5(a) of the main contract and secondly, express pre-condition specifying that the plaintiff shall within one month of the receipt of such instructions give notice in writing of his intention to claim for direct loss or

expense to the SO together with an estimate of the amount of such loss and/or expense. A

[210] Insofar as it relates to the procedure of notice and claim submission for loss and/or expenses, the express cl 5(d) of the conditions of contract here (*AA3/423*) is in pari materia with the express cl 44 of the conditions of contract (*AA3/438*). B

[211] In the Court of Appeal case of *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd* [2016] 4 MLJ 570 ('Perbadanan Menteri Besar Kelantan'), which also involved a contract based a PWD 203A standard form contract (1983 Ed), the Court of Appeal held that the contractor was not entitled to claim for the prolongation costs as it had failed to meet the mandatory pre-conditions set out under cll 43 and/or 44 of the main contract. C D

[212] Interpreting the express cl 5(d) in the context of the contract and in light of Court of Appeal's decision in the case of *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd* [2016] 4 MLJ 570 ('Perbadanan Menteri Besar Kelantan'), this court agrees with the defendant's submission that a contractor who claims for loss and expense arising from alleged acceleration of works under cl 5(d) has to firstly provide evidence of an instruction from the SO in accordance to cl 5(a) of the main contract and secondly, express pre-condition specifying that the plaintiff shall within one month of the receipt of such instructions give notice in writing of his intention to claim for direct loss or expense to the SO together with an estimate of the amount of such loss and/or expense. E F

[213] It is undisputed that the first time the plaintiff provided a notice in writing to claim for acceleration costs together with an estimate of the amount of such loss and/or expense was by way of its letter to the defendant dated 12 December 2013 *(AB3/12–16).* G

[214] In other words, the first notice together with an estimate of the amount of such loss and/or expense was issued by the plaintiff over six months after the Package 2 works were satisfactorily completed on 27 June 2013, and as such, is not a valid notice under cl 5(d) of the contract. H

[215] In our present case the plaintiff has not given the requisite notice within the stipulated time and also has not submitted the claim with particulars under cl 5(d). As the prerequisite notice and claim procedure has not been complied with, on this ground alone the plaintiff's claim for alleged acceleration costs is dismissed. I

[216] As regards the question whether or not there was any instruction by the defendant or the SO to the plaintiff to accelerate works, the only evidence raised by the plaintiff which purportedly amounts to instructions to accelerate by the defendant are certain letters from PW2 to the plaintiff which states, inter alia, that the defendant was taking over the various zones *(AB3/169) (NOP/4/4–5).*

[217] From the documentary evidence adduced in the present case, it is evident that these letters of PW2 on behalf of the defendant were sent *after* the plaintiff had issued the handover letters to the defendant asking for and/or consenting to the partial occupation of the respective zones. At the trial, DW1 in her re-examination that handover of each zone was initiated by the plaintiff and accepted by the defendant, and the letters from PW2 to the plaintiff merely served as confirmation by the defendant of the takeover of the respective zones *(NOP/8+9/34).* During his cross-examination, PW2 himself confirmed that his letters to the plaintiff were merely confirmation and acceptance by the defendant to the plaintiff regarding the handing over of each zone, and did not amount to an instruction to accelerate works *(NOP/6/10–11).*

[218] In the premises, this court finds that that the letters from PW2 to the plaintiff did not amount to instructions to accelerate works under the main contract. Consequently, the plaintiff has failed to adduce any evidence that that the defendant had in fact issued any instruction to the plaintiff to accelerate the works.

[219] Therefore, on the ground of the absence of any instruction to accelerate works, the plaintiff's acceleration claim is also dismissed.

[220] As regards the third argument whether or not the plaintiff in fact accelerated the construction works, the defendant submitted that the plaintiff has failed to prove that the works under the main contract were in fact accelerated for the following reasons:

(a) the plaintiff was, at all material times, aware that the works were to be carried out sequentially;

(b) the plaintiff had expressly consented to the defendant taking partial occupation of the various zones; and

(c) the plaintiff has failed to provide any evidence that its works were actually accelerated.

[221] The main contract expressly stipulates that the works were to be commenced and completed by the plaintiff in sections, on a zone by zone basis,

starting from the outside to the inside. In this regard, the following contractual provisions are relevant:

(a) cl 38(c) of the main contract expressly provides that possession of Site may be given in sections or in parts *(AA3/435)*;

(b) Section F (Instruction to Tenderers) of the main contract: Section D — Preliminaries (Generally) states in relation to possession of site, the contractor's attention is drawn to the sequence of works which must be programmed, planned, executed, completed and commissioned in the manner to allow the airport to function without interruption. The possession shall be given in sequence to its order and shall be deemed as possession of site with a single end completion date *(AA3/561)*;

(c) Section F (Instruction to Tenderers) of the main contract: Section D — Preliminaries (Contract Administration) states that the contractor shall carry out the works in such order as the SO may direct and the contractor shall not be entitled to claim any expense if the SO directs the contractor to reorganize his work force so as to complete the project within the contract period *(AA3/585)*;

(d) Section F (Instruction to Tenderers) of the main contract: Section D — Preliminaries (Miscellaneous) states that the contractor's attention is drawn to the sequence of works on the programme in that the works shall be done and completed in sequence and section which must be completed and commissioned in the provided order and as approved by the SO *(AA3/624)*; and

(e) Appendix IV of the main contract at cl 2.0 (Sequence of Work) states that generally, the sequence of work can be divided and executed in different zones. It further states that the schedule presented in the tender documents shows that the sequence of works was such that the works start from 'outside' moving to 'inside' and that Zone 5 of the main terminal building starts when the other zones are duly completed. This because the heart of the operation was in this area and it was best to be constructed last *(AA5/1581)*.

[222] The purpose and importance of the sequence of the works was expressly stipulated in Appendix IV of the of the main contract at cl 1.0 (Introduction) *(AA5/1581)* in the following words:

CONSTRUCTION SEQUENCE

1.0 INTRODUCTION

1.1 Due to the nature of the project, the construction of the upgrading works and the new extension of the Main Terminal Building shall not interfere with the operation of the Penang International Airport. As such, the construction sequence

in this teder document should be viewed as one of the most important criteria during the course of construction'.

[223] From the express terms of the contract, it is evident that the sequence of works in zones under the main contract was to accommodate a live and operating airport environment, which would allow the upgrading works at Penang International Airport to be carried out without having to shut down the airport substantially or completely.

[224] Accordingly, the main contract clearly and expressly prescribes that the works were to be commenced and completed by the plaintiff sequentially in zones.

[225] Moreover, it is evident from the contemporaneous evidence that, even before the commencement of the Package 2 works, the plaintiff was, at all material times, aware that the works were to be carried out sequentially by zones. This is evident from: (i) the plaintiff's work programmes (see the plaintiff's first Work Programme dated 4 October 2010: *AB3/31–66*, the plaintiff's revised Work Programmes: *AB3/175–178 and AB1/128–155*); and (ii) the minutes of meetings including the meeting held on 21 October 2010 shortly after the commencement of works wherein it was recorded the delineation of the works by zones, with each zone having its own commencement and completion date. Representatives from the plaintiff were present during this meeting and even provided updates on the status of the works from each separate construction zone *(AB3/25–30)*.

[226] At the trial, PW1 acknowledged under cross-examination that the plaintiff's own work programmes acknowledged that the works were to be carried out in sequence. Further, PW1 admitted that, pursuant to the main contract, possession of the site was to be given in parts and carried out sequentially *(NOP/1/17–18)*. DW1 testified at the trial that during the course of project, site meetings were held periodically wherein the plaintiff provided updates about the status and completion of the project on a zone-by-zone basis, and at no time during any of these meetings did the plaintiff ever object to the sequencing of the works *(WS-DW1/39)*. Indeed, no minutes with any such object has been adduced by the plaintiff.

[227] In the circumstances, this court finds that at all material times during the tender stage as well as the construction stage the plaintiff was well aware that the works were to be commenced and completed sequentially by zones.

[228] As regards the question whether or not the progressive handing over of the completed zones was by the consent of the plaintiff, DW1 explained the process by which the defendant obtained the necessary consent from the

plaintiff to take possession and occupy the various zones. DW1 stated that, by way of handover letters from the plaintiff to the defendant during the currency of the project, the plaintiff confirmed that the defendant had taken possession each zone on the date specified therein *(AB16/112–122)* ('the plaintiff's handover letters'). Thereafter, on 31 March 2014, DW1 issued CPOs to the plaintiff certifying that the defendant had taken possession and occupied the various zones on the respective dates specified in the plaintiff's handover letters, with the consent of the plaintiff *(AA10/35–70) (WS-DW1/41–42).*

[229] The material details of the plaintiff's handover letters to the defendant, namely the date of each letter, the zone handed over and the date of handover, are summarised below alongside the certified handover dates specified in the defendant's subsequent CPOs dated 31 March 2104 *(AB16/112–122) (AA10/35–70)*:

Date of plaintiff's handover letter	Zone	Date of handover (as stated in plaintiff's handover letters)	Date of handover (as stated in defendant's CPOs)
2 November 2011	Zone 1	1 November 2011	1 November 2011
19 December 2011	Zone 2 and 3A	15 December 2011	15 December 2011
3 May 2012	Zone 4A	2 May 2011	2 May 2011
18 June 2012	Zone 4B	15 June 2012	15 June 2012
17 August 2012	Zone 4D1	15 August 2012	5 September 2012
21 September 2012	Zone 4D2	20 September 2012	20 September 2012
17 August 2012	Zone 5A, 5B and 5F	16 August 2012	16 August 2012
17 May 2012	Zone 5C and 5D	15 May 2012	15 May 2012
24 May 2012	Zone 5E	23 May 2012	23 May 2012
23 April 2012	Zone 5G	20 April 2012	20 April 2012
2 July 2012	Zone 5H	30 June 2012	30 June 2012

[230] As illustrated in the table above, all of the handover dates specified in the plaintiff's handover letters were subsequently replicated in the CPOs which were issued by the defendant on 31 March 2014. The sole exception is the CPO for Zone 4D1, which specifies a handover date of 5 September 2012, which is later than the handover date of 15 August 2012 specified in the plaintiff's respective handover letter *(AA10/50)*.

[231] During his cross-examination, PW1 admitted the following

(NOP/1/22):

(a) the plaintiff consented to the occupation of the zones by the defendant by way of the plaintiff's handover letters;

(b) the plaintiff did not raise any objections to giving possession on a zonal basis to the defendant in any of the plaintiff's handover letters; and

(c) the plaintiff's handover letters did not mention anything about an acceleration claim by the plaintiff relating to the partial occupation.

[232] When referred to one of the plaintiff's handover letters, the plaintiff's other factual witness, PW2, also conceded that it amounted to consent by plaintiff for partial occupation pursuant to cl 42 the main contract *(NOP/6/11).*

[233] In the circumstances this court finds that the plaintiff in fact consented to the progressive handing over of the completed zones to the defendant during the course of the construction project and as such there is no valid basis for the plaintiff to rely upon such progressive hand-over of completed zones as the basis or part of the basis for any acceleration claim.

[234] Moreover, progressive handing over of the completed zones by the plaintiff-contractor to the defendant-employer during the course of the construction project is expressly stipulated in the contract here: see cl 42 in *AA3/436.* At the trial, also agreed that the main contract allowed for partial occupation of the site according to the zones set out in the programme, as long as consent to do so was obtained by the plaintiff *(NOP/1/18).*

[235] There is nothing unusual about progressive handing over of the completed zones by the contractor to the employer during the course of the construction project (or the employer's partial occupation of completed areas or parts of the project ahead of the practical completion of the entire project) and ahead of the practical completion of the entire project. It is in the express term of PWD Standard Form of Contract (which is also used in this project) as well as in other standard forms of contract. This mechanism of progressive handing over of the completed zones by the contractor to the employer during the course of the construction project (or the employer's partial occupation of completed areas or parts of the project ahead of the practical completion of the entire project) is *mutually* beneficial to both the employer and the contractor. The benefits to the contractor of such partial hand-over and partial occupation mechanism include (a) *pro rata* reduction of the rate of contractual liquidated damages for delay in the balance works; (b) passing responsibilities for care and protection of completed works in the hand-over parts from the contractor to the employer; (c) passing of risks of theft or damage by fire or accident of the completed and handed-over works from the contractor to the contractor; (d)

cost-saving in not having to station security guards to protect the completed parts of the works which have been handed over to the employer, etc. It is the finding of this court on a balance of probabilities that the plaintiff-contractor was aware of and have enjoyed these benefits when the plaintiff willingly consented to the progressive handing over of the completed zones by the contractor to the employer during the course of the construction project (or the employer's partial occupation of completed areas or parts of the project ahead of the practical completion of the entire project) in this project.

[236] Further, this court agrees with the defendant's submission that the plaintiff has failed to establish that it had, in fact, accelerated any of its works in any of the zones for the Package 2 works. In particular, the plaintiff has not provided any evidence that the defendant was unable to deliver the site to the plaintiff in accordance to the plaintiff's work programme, or that the date of occupation by the defendant was earlier than the scheduled finish date pursuant to the plaintiff's work programme.

[237] On the question of quantum, the plaintiff's claim for acceleration costs is as set out in its letter dated 26 October 2016 *(AB3/1)*. In essence, the plaintiff contended that it has allegedly incurred an additional sum of RM20,076,768.75, which is calculated based on the sum of RM124,700,427, being the total cost of works for the accelerated works in Zones 1 to 5 for 594 days, at a rate of 16.1%.

[238] The plaintiff's quantum of alleged acceleration costs can be broken down into three components, namely: (1) total of 594 accelerated days; (2) breakdown of 16.1% rate; and (3) total value of works for Zones 2 to 5.

[239] In the first place, the method of the plaintiff's quantum expert's computation of the alleged acceleration costs is not consistent with the sub-heads of alleged acceleration costs pleaded in para 17(b) of the amended statement of claim: see para 204 above. As a party is bound by its pleadings, the plaintiff cannot plead specific sub-heads of alleged acceleration costs in its pleadings and then seek to prove its acceleration costs by another method which is totally different from or is materially inconsistent with its pleaded sub-heads of alleged acceleration costs. On this ground of material departures from its pleadings alone, it suffices for this court to hold that the plaintiff has failed to prove its alleged acceleration costs.

[240] In the second place, the plaintiff's quantum expert's first component of alleged total of 594 accelerated days is speculative and/or theoretical, and is not specifically proved by documentary evidence in our present case.

[241] In the third place, the plaintiff's quantum expert's second component

of alleged 16.1% is devoid of evidential basis. There is no documentary evidence of any loss of productivity, percentage loss of productivity, costs of works before the alleged acceleration measures, costs of implementing the alleged acceleration measures, what were the actual acceleration measures allegedly implemented, etc. The 16.1% rate has been arbitrarily or theoretically derived without reference to substantiation records and without showing causal link between the alleged instruction complained of and the result of complying with the alleged instruction.

[242] In the circumstances, even if the plaintiff were to prove any entitlement to acceleration claim (which this court has held there was no such entitlement), the plaintiff's acceleration claim in our present case would also be dismissed on the ground of lack of specific proof of the alleged loss or the quantum thereof.

[243] In the premises, this court has dismissed the plaintiff's claim for acceleration costs.

LOSS AND/OR EXPENSE OR PROLONGATION COSTS

[244] In our present case the plaintiff has claimed for prolongation costs in the total sum of RM 12,176,474.11 on the basis that it has allegedly incurred additional costs as a result of the three EOTs granted by the defendant under the main contract, which cumulatively amounted to 513 days *(SOC/17(c)) (WS-PW1/47).* In the written submissions, the plaintiff contends that is it entitled to claim for these prolongation costs under cll 43 and 44 of the contract read together.

[245] In opposing the plaintiff's claim for prolongation costs, the defendant submitted that the plaintiff is not entitled to the alleged prolongation costs for the following reasons:

(a) the applicable provisions with regard to claiming prolongation costs are cll 43 and 44 of the main contract and not cl 5(d) as alleged;

(b) the plaintiff has failed to satisfy the contractual pre-conditions pursuant to cl 44 of the main contract; and

(c) the plaintiff has failed to prove the quantum of its claim for prolongation costs.

[246] As both the plaintiff and the defendant in their respective written submissions have argued their clients' positions in connection with this prolongation costs claim based on the applicability of cll 43 and 44 of the contract to such prolongation cost claim, there is the common ground of the applicability of cll 43 and 44 of the contract when considering and deciding the

plaintiff's claim for prolongation costs. In any event, even if a contractor were to premise his claim for prolongation costs upon cl 5(d) of the contract, this court does not find any material difference in the procedure of notice and claim submission between cl 5(d) claim and clause 44 claim: see paras 162–165 above.

[247] Clause 43 of the main contract stipulates to the effect that upon it becoming reasonably apparent that the progress of works is delayed by any reason stated in subclause (a) to (k) therein, the SO shall make in writing a fair reasonable extension of time for completion of the works *(AA3/437)*. In the present case, the SO granted extensions of time to the plaintiff for Package 2 Works under the main contract and the plaintiff based its prolongation cost claims upon the extensions of time granted by the SO.

[248] Clause 44 of the main contract stipulates the requisite procedure for the plaintiff to claim for loss and expense if the regular progress of the works has been materially affected by reason of the delay events in cl 43. It reads as follows *(AA3/438)*:

> 44. Loss and Expense Caused by Delays
>
> If the regular progress of the Works or any part thereof has been materially affected by reason as stated under Clause 43(c), (f) or (i) hereof (and no other), and the Contractor has incurred direct loss and/or expense for which he would not be reimbursed by a payment made under any provision in this Contract, then the Contract shall within one (1) month of the occurrence of such event of circumstance give notice in writing to the S.O. of his intention to claim for such direct loss or expense together with an estimate of the amount of such loss and/or expense, subject always to Clause 48 hereof.

[249] The wording of cl 44 appears to suggest that there are two pre-conditions to be met in order for the plaintiff to be entitled to a claim for loss and expense caused by delays:

(a) firstly, the regular progress of the works or any part thereof must have been materially affected by a reason stated under cl 43(c), (f) or (i) and no other; and

(b) secondly, the plaintiff must within one month of the occurrence of the delay event give notice in writing to the SO of its intention to claim for direct loss and expense together with an estimate of the amount of such loss and/or expense.

[250] Clause 44 of the PWD 203A standard from of contract, which is also used in this project in our present case, has been the subject of decision by our Court of Appeal in *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan*

Majubina Sdn Bhd [2016] 4 MLJ 570. In *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd*, the Court of Appeal in an unanimous judgment delivered by Mary Lim JCA (now FCJ) held the contractor's right to claim loss and expense was subject to the several pre-qualifications contained in cl 44:

> [25] Having examined cl 44, with respect, we find that we again, cannot agree with the learned High Court judge. Contrary to the decision of the court below that the respondent is entitled to all the loss and expense claims because there is delay, the converse is actually the correct position. *The right to claim for direct loss and expense under cl 44 in the event of delay does not arise in every instance of delay*. Delay does not per se or in itself result in a claim for loss and expense. The parties have specifically agreed that the right to *such a claim is dependent on several pre-qualifications* and this is evident from the terms of cl 44.
>
> [26] First of all, the recognised category delay must materially affect the regular progress of the work. That is a matter of degree and quite obviously one of evidence. Sufficient evidence must be placed before the court to entitle the respondent to this item of claim.
>
> [27] Second, the cause or reason for the affectation of regular progress of work which is manifested in a delay in the progress *must be that which 'is stated under cll 43(c), (f) or (i) hereof (and no other)'*. Clause 43 recognises a substantial list of causes or reasons for delay as justifying an application for EOT. However, *cl 44 only recognises three of such reasons as warranting a claim for direct loss and expense*, that is delays under cll 43(c), (f) and (i).
>
> [28] Third, the loss and expense must be direct loss or expense which 'would not be reimbursed by a payment made under any other provisions in this Contract'. In other words, it is not an indirect loss or expense. This is again, a question of fact.
>
> [29] Fourth, notice of such a claim *must be made within one month from the occurrence of the event or circumstance. Together with the notice, the respondent must provide proof of such loss and expense*. The notice requirements have been construed to be *strict requirements which must be met before a claim arises as decided by this court in Perbadanan Pembangunan Pulau Pinang v Trikkon Construction Sdn Bhd* [2012] 2 MLJ 28. (Emphasis added.)

[251] In the recent High Court case of *Sunissa Sdn Bhd v Kerajaan Malaysia & Anor* [2020] MLJU 283, the contractor's counsel submitted that cll 44.1 to 44.3 of the PWD 203A standard form contract (2007 Ed could not be construed to contain any pre-conditions because, unlike the loss and expense provisions in the PAM 2006 and CIDB standard form contracts, the loss and expense provision in the PWD contract did not use the specific term 'condition precedent'.

Following a detailed and thorough assessment of both local and foreign authorities, Lee Swee Seng J (now JCA) disagreed with the contractor's counsel and held that cll 44.1 to 44.3 of a PWD 203A standard form contract (2007

Ed) did indeed contain a condition precedent with regard to the notice requirement. The salient parts of the judgment are reproduced below:

> [72] In the light of such clear decisions emanating from our Court of Appeal and supported by cases on similar clauses of condition precedent in the UK Courts, I am constrained to hold that the condition precedent in Clause 44.1 and Clause 44.3 would apply, unpleasant as the consequence may be.
>
> ...
>
> [75] I would thus hold that the words in Clauses 44.1, 44.2 and 44.3 are such that, read together and giving its ordinary and natural meaning, *do amount to a condition precedent* where the Notices' requirement is concerned. (Emphasis added.)

Pertinently, the learned judge also went on to make the following determinations:

(a) the condition precedent was not caught by s 29 of the Contracts Act 1950 (paras 99–105 of the judgment);

(b) the condition precedent was not unconscionable or otherwise against public policy (paras 106–111 of the judgment); and

(c) the condition precedent does not offend the principle of unjust enrichment (paras 112–119 of the judgment).

[252] Following the aforesaid decision of the Court of Appeal and in the context of cl 44 of PWD 203A contract, a contractor is not entitled to claim for loss and/or expense or prolongation cost under cl 44 of the PWD 203A standard from of contract if the contractor fails to fulfil any one of the following four mandatory prerequisite conditions for such claim:

(a) the recognised category of delay must materially affect the regular progress of the work, or, in other words, an excusable delay event which has caused a *critical delay* to the overall completion of the Works under the contract, as the term is explained by the learned author of *Hudson's Buidling and Engineering Contracts* and cited with approval by Hasnah JCA (now FCJ) in the Court of Appeal case of *Kerajaan Malaysia (Jabatan Kerja Raya) v Global Globe (M) Sdn Bhd* [2019] 1 MLJ 281; [2019] 9 CLJ 191 para [41] and by Harmindar Singh JCA (now FCJ) in the Court of Appeal case of *Yuk Tung Construction Sdn Bhd v Daya Cmt Sdn Bhd and another appeal* [2020] MLJU 1084; [2020] 1 LNS 1314 para [29];

(b) the type or category of delay must be that which is stated under one of the limbs of cl 43(c), (f) or (i) (and no other), or in other words, *compensable excusable delay event*, and not any other delay under one of limbs of cl 43(a), (b), (d), (e), (g), (h), (j) or (k) which are excusable but non-compensable delay events: see Court of Appeal's decision in

Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd [2016] 4 MLJ 570;

(c) the loss and expense must be *direct* loss or expense which 'would not be reimbursed by a payment made under any other provisions in this Contract' — this incorporate the principle against double recovery, and 'direct loss or expense' has been interpreted in various decided cases to mean the losses and expenses which under the common law are recoverable as damages for breach of contract and which are not too remote: see English Court of Appeal cases of *FG Minter Ltd v Welsh Health Technical Services Organisation* (1980) 13 BLR 1 and *Rees & Kirby Ltd v Swansea City Council* (1985) 30 BLR 1 at p 11; and

(d) it is mandatory that the notice of such a claim must be made within one month from the occurrence of the event or circumstance, together with the notice, the contractor must provide an estimate of the amount of such loss and expense: see Court of Appeal's decision in *Perbadanan Menteri Besar Kelantan v Syarikat Perusahaan Majubina Sdn Bhd* [2016] 4 MLJ 570.

[253] In our present case, the plaintiff's claim for prolongation costs in the present case is premised on the extensions of time granted pursuant to EOT Certificate No 1, No 2 and No 3.

[254] Pursuant to EOT Certificate No 1, the plaintiff was granted extension of time pursuant to cl 43(i) of the main contract *(AA10/15–16)*. As such, as rightly conceded by the defendant, the plaintiff would be entitled to claim loss and expense arising from this delay event subject, however, to satisfying the mandatory procedural prerequisite in the fourth pre-condition.

[255] However, pursuant to EOT Certificates No 2 and No 3 *(AA10/17–21)*, the plaintiff was granted extensions of time pursuant to cl 43(e) of the main contract *(AA3/437)*. Delays occasioned by the reason specified in cl 43(e) do not fall under one of the three stipulated provisions in cl 44 which gives rise to an entitlement to claim for loss and expense. In the premises, this court holds that the delay events in EOT Certificates No 2 and No 3 are non-compensable excusable delay events in respect of which the plaintiff is not entitled to make any loss and expense claim even if the plaintiff has fulfilled the mandatory procedural requirements under the fourth pre-condition.

[256] In *Perbadanan Menteri Besar Kelantan* case, the Court of Appeal held that in calculating the time frame of one month, the correct date is the date of the event claimed of and not the date of the granting of the extension of time: see para [38] of the judgment.

[257] In our present case, the various delay events relating to the main contract and the dates in which they occurred can be derived from the plaintiff's three EOT applications under the main contract. This is summarised in the table below:

EOT Application No.	Date of EOT Application	Delay Events submitted by the Plaintiff	Delay Event Date(s)
1 (AB1/64–155)	18 May 2011	Various delay events at Zones 1, 2 and 3A.	From 2010 to 2011
2 (AB1/58–64)	21 May 2012	Site Instruction and Engineer Instruction	27 March 2012
3 (AB1/55–57)	16 November 2012 4 June 2013	Various Architect Instructions and Engineer Instructions	September 2012 to May 2013
	(Plaintiff's Re-submission)		

[258] In arguing that it met the pre-condition on mandatory procedural requirements, the plaintiff relies on the following correspondence *(WS-PW1/47)*:

(a) the plaintiff's letter dated 14 January 2011 to the defendant wherein the plaintiff raised several issues relating to the project, including, amongst others, incomplete construction drawings and the defendant being unable to give reasonable possession of site *(AB5/169–170)*;

(b) the plaintiff's letter dated 14 November 2011 wherein the plaintiff raised a purported issue regarding the possession of the site *(AB3/106–107)*;

(c) the plaintiff's letter dated 4 September 2013 wherein the plaintiff submitted an estimation of its prolongation claim pursuant to all three of its EOT applications *(AB16/54–59)*; and

(d) the plaintiff's letter dated 26 October 2016 wherein the plaintiff submitted its prolongation claim pursuant to all three of its EOT applications *(AB1/1–3)*.

[259] As regards the plaintiff's letters dated 14 January 2011 *(AB5/169–170)* and 14 November 2011 *(AB3/106–107)*, both letters fail to satisfy the second pre-condition as neither of these letters contain any estimate of the loss or expense incurred by the plaintiff. This is apparent from the contents of the said letters and was also admitted by PW1 during cross-examination *(NOP/1/33-35)*.

[260] With regard to the plaintiff's letter dated 4 September 2013, this letter also fails to satisfy the second pre-condition because the letter does not fall within the stipulated one-month period from any of the delay events cited in any of plaintiff's three EOT applications *(AB16/54–59)*. In particular:

(a) this letter was issued over two years after the delay events cited in the plaintiff's EOT1 application;

(b) this letter was issued over 1.5 years after the delay events cited in the plaintiff's EOT2 application; and

(c) this letter was issued four months after the delay events cited in the plaintiff's EOT3 application.

[261] At the trial, PW1 conceded during cross-examination that the first time that the plaintiff submitted its notice in writing to the SO of its intention to claim for direct loss and expense together with an estimate of the amount of such loss and/or expense for all three delay events was by way of the plaintiff's letter dated 4 September 2013 *(AB16/54–59) (NOP/1/36)*.

[262] As regards the plaintiff's letter dated 26 October 2016, even though this letter contains an estimate of the loss and expense for the plaintiff's prolongation claim, the letter similarly fails to satisfy the Second Pre-Condition because it does not fall within the stipulated one-month period from any of the delay events cited in any of plaintiff's three EOT applications *(AB1/1–3)*. In particular:

(a) this letter was issued over four years after the delay events cited in the plaintiff's EOT1 Application;

(b) this letter was issued over 4.5 years after the delay events cited in the plaintiff's EOT2 Application; and

(c) this letter was issued over three years after the delay events cited in the plaintiff's EOT3 Application.

[263] In the premises, this court finds that for all three of the EOTs granted under the main contract (Package 2 Works), the plaintiff has not satisfied the fourth pre-condition as it failed to give notice in writing to the SO within one month of the occurrence of any of the delay events of its intention to claim for direct loss and expense together with an estimate of the amount of such loss and/or expense.

[264] Based on all the aforesaid reasons and applying the principles on mandatory notice requirements in the case of *Perbadanan Menteri Besar Kelantan* this court has therefore dismissed the plaintiff's prolongation claims.

[265] Not only has the plaintiff failed to prove its prolongation claims in terms of liability, the plaintiff has also failed to prove the quantum of the alleged prolongation cost, a specie of special damages.

[266] As regards the proof of prolongation costs, this court agrees with what has been decided recently by Lim Chong Fong J in *PBLT Sdn Bhd v Prestasi Reka Sdn Bhd & Ors* [2020] MLJU 2056, which also involved a contract based a PWD 203A Standard Form Contract (1983 Ed), Lim Chong Fong J set out several general principles of law with regard to recovery of a contractor's claim for prolongation costs. These principles are as follows:

(a) the burden of proof of loss or damage lies on the contractor;

(b) the contractor may be denied recovery if at the material times he was in concurrent delay; and

(c) the contractor must be able to substantiate its claim with the necessary evidence of loss rather than to claim based on estimate of loss derived from the preliminaries as priced in the contract document. The formulae method of computation based on average preliminaries costs extracted from the bills of quantities of the contract multiplied by the number of days of delay is not an acceptable method to claim for prolongation loss and expense.

It is obvious that the principle stated in item (a) above is trite law of evidence. The principle stated in item (b) above is an offshoot of the settled and fundamental principle that a party cannot benefit from its own wrong: see para 271 below for the decided authorities. The principle stated in item (c) above is consistent with the legal principle under the law of damages that a claimant for damages in contract has to prove the causal link between the breach of contract and the head of damages claimed in respect of the said breach. The courts have not judicially recognised that the formulae method of computation *per se* has fulfilled the causal link between the breach of contract and the head of damages claimed in respect of the said breach. Nevertheless, this court does not rule out the possibility that there may be exceptional circumstances where the parties' mutually agreed and implemented allocation of each item of preliminaries into initial component, recurring component (or time-related component) and completion component may probably justify the court's acceptance of recurring component (or time-related component) as agreed upon and implemented by the contracting parties as the reasonable method for computing the prolongation costs by using the recurring component (or time-related component). Be that as it may, the plaintiff in our present case has not specifically pleaded or proved any such mutually agreed split any item of the preliminaries into initial component, recurring component (or time-related component) and completion component or any implementation of the same in this project.

[267] In the circumstances of our present case, this court agrees with the defendant's submission that the plaintiff has not discharged its burden of proving the quantum of the alleged prolongation costs and that the causal link between the delay event and the alleged heads of prolongation costs has not been established with specific evidence by the plaintiff.

THE DEFENDANT'S COUNTERCLAIM FOR LIQUIDATED DAMAGES IN RESPECT OF CUB WORKS

[268] In counterclaiming for liquidated damages ('LAD') of RM444,000 against the plaintiff in respect of CUB Works, the defendant submitted in paras 546–566 of the defendant's written submissions which are summarised as follows:

(a) the rate of LAD for CUB is RM6,000 per day: cl 2.1 in *AA1/7* (para 547 of the defendant's written submissions);

(b) the plaintiff failed to complete the CUB works by the extended completion date of 29 July 2011 and Certificate of Non-Completion ('CNC') was issued by the SO (*AA10/24-25*); the plaintiff completed the works for CUB on 11 October 2011 which was duly certified by way of a CPC *(AA10/29–30)*. As such, there is a delay of 74 days in the completion of the CUB works (para 548 of the defendant's written submissions);

(c) the defendant argued that the plaintiff is not entitled to any further extension of time and the plaintiff failed to complete the CUB works timeously (paras 551, 555–557 of the defendant's written submissions);

(d) the defendant contended that the plaintiff's EOT Application No 2 was made out of time and therefore, according to decided authorities in *Yuk Tung Construction Sdn Bhd v Daya Cmt Sdn Bhd and another appeal* [2020] MLJU 1084; [2020] 1 LNS 1314 (CA), *KL Eco City Sdn Bhd v Tuck Sin Engineering & Construction Sdn Bhd & Anor* [2020] MLJU 2457 (HC), the plaintiff was not entitled to further extension of time in respect of EOT Application No 2 (paras 558–559 of the defendant's written submissions); and

(e) the defendant contended that the plaintiff was not entitled to extension of time for the delays caused by the defendant's direct contractors Sunway Engineering (request dated 9 September 2011 to the plaintiff hold works on the rendering in the Chiller Plant Room and a brick wall to facilitate certain mechanical installations *(AB4/150)*) and Letrik PJ Union (request dated 25 July 2011 to the plaintiff hold works for the CUB roof to facilitate the delivery and installation of a transformer to be housed in the building *(AB4/152)*) because the plaintiff only submitted its EOT Application No 2 on 27 February 2012 (paras 560–566).

[269] In opposing the defendant's counterclaim for LAD in respect of CUB Works, the plaintiff submitted in paras 287–307 of the plaintiff's written submissions as follows:

287. In respect of the CUB, the original completion date was 30 April 2011. *See: AA1, page 15*

288. The Plaintiff was only granted 1 EOT for the CUB works. Further to the Plaintiff's application dated 13 April 2011, and subsequently 10 June 2011, the Defendant wrote to the Plaintiff some 5 months later, by its letter dated 14 September 2011, enclosing only a photocopy of the EOT No. 1 Certificate dated 21 July 2011, by which Plaintiff was granted an extension of time from 30 April 2011 until 29 July 2011. *See: AB4, pages 16–17 & pages 20–21, See also: AB4, pages.69-70*

289. However, the Plaintiff was unable to complete the CUB works by 29 July 2011 as the Plaintiff had to stop work on roof construction due to the inability of a contractor appointed directly by the Defendant, that is Letrik P.J. Union Sdn Bhd (Electrical Works), to complete its works on time.

290. By its Memorandum dated 25 July 2011, Letrik P.J. Union indicated that the equipment it was required to install would only be delivered in September 2011 and the equipment had to be installed through the roof due to its large size. As a result, the Plaintiff had no choice but to stop work. *See: AB4, page 152*

291. The Plaintiff also had to stop work on rendering works in the Chiller Plant Room and brick wall at Gridline A, 3a-5 as a result of the delay caused by another contractor appointed directly by the Defendant, that is Sunway Engineering Sdn Bhd (Mechanical Works), as noted in its letter dated 9 September 2011, as the equipment it was required to install was also huge and had to be installed through an opening in the wall. *See: AB4, pages 150–151*

292. Therefore, the Plaintiff was clearly unable to complete the CUB works by the extended completion date on 29 July 2011, as Letrik P.J. Union had formally notified the Plaintiff from as early as 25 July 2011 that it could not deliver the relevant equipment on time and the anticipated delivery of the equipment would only be in September 2011, and as the equipment had to be installed through the roof, the construction of the roof could not be completed. The Plaintiff also could not continue with the rendering and brick wall works for the reasons noted above.

293. The background to these delays has been fully explained by PW2. As explained by PW2, the Defendant coordinated with Letrik PJ Union and Sunway Engineering Sdn Bhd directly, through PW2. The said direct contractors notified the Defendant of the delay on carrying out their portion of the work, as a result of which the Defendant then verbally instructed the Plaintiff to put the Plaintiff's works on hold. The Defendant was notified about the delays informally by the said direct contractors at first, and subsequently, the Defendant requested for formal notifications from them. At all times, the Defendant was aware of the delays by the direct contractors. *See: Notes of Evidence, 14.8.2020, pages 5-6*

294. PW2 also confirmed that the SO at the material time, Dato Abdul Nasir, knew about the delay and about the verbal instructions from PW2 to the Plaintiff to hold on with its works, which was discussed in the Defendant's site meetings and which

would have been minuted by the Defendant. For the record, the Defendant did not produce the minutes of the site meetings at trial. *See: Notes of Evidence, 14.8.2020, page 6*

295. PW2 further confirmed that the Defendant was aware of the matters raised in the Memorandum dated 25 July 2011 from Letrik P.J. Union and in the letter dated 9 September 2011 from Sunway Engineering Sdn Bhd even before the said Memorandum and letter were issued as the matters had been discussed in site meetings. *See: Notes of Evidence, 14.8.2020, pages 6-9*

296. PW2 testified that he personally recommended to the SO at the material time, DW1, that an EOT be granted to the Plaintiff for the delays caused by the said direct sub-contractors but DW1's response was that she needed time to become familiar with the Project, and everyone was focused on the Package 2 works at the time. *See: Notes of Evidence, 14.8.2020, page 10*

297. It must also be noted that the Plaintiff had no control whatsoever over these direct contractors. Under Clause 29, the Plaintiff was only responsible for Nominated Sub-Contractors. In addition, the Plaintiff was verbally informed by PW2 that the Plaintiff would be granted an EOT as the cause of delay would justify the granting on an EOT. In its letter dated 29 August 2011 to the Defendant, the Plaintiff placed on record that it had been verbally informed by the Defendant that its application for an EOT will be considered and will be approved as the cause of delay is acceptable and provided for. *See: AB4, pp. 32–33*

298. PW2 also confirmed at trial that he had verbally informed the Plaintiff that its EOT application would be approved as the delay was not caused by the Plaintiff, but by the said direct contractors. PW2 then made the recommendation to the management to issue EOT, which the SO verbally agreed to do, but as everyone was focused on Package 2, this was not acted upon at the time. *See: Notes of Evidence, 14.8.2020, pages 10–11*

299. Further, and critically, the Defendant had already acknowledged that the delays caused by the said direct contractors was sufficient reason to grant the Plaintiff and EOT, when on 21 July 2011, the Defendant granted an EOT for the same reason in its EOT Certificate for Package 2, where an EOT of 106 days was granted for delays in completing the CUB by others. *See: AA10, page 15*

300. The Plaintiff will submit that the failure of the Defendant to consider the circumstances which necessitated the granting of an EOT as well the failure to grant such an EOT was a failure by the SO to carry out the positive duty

301. The Plaintiff only received a photocopy of a CNC for the CUB works under cover of a letter from the Defendant dated 26 August 2011, which enclosed a photocopy of a Certificate dated 30 July 2011 which was signed on 22 August 2011. Therefore, the Plaintiff received a copy of a CNC before even receiving the EOT certificate dated 21 July 2011 referred to above. In addition, the Defendant had failed to take into consideration the fact that the actions of its direct contractors had compelled the Plaintiff to stop works from as early as 25 July 2011 and in all probability, even earlier, based on the evidence of PW2 that the Defendant had requested the Plaintiff to hold on with its works even before the formal notifications of delay were issued by the direct contractors. In those circumstances, the Plaintiff

did not accept the validity of the CNC. *See: AB4, pages 71–73*

302. The Plaintiff expressly protested the issuance of the CNC by way of various letters dated 29 August 2011, 30 August 2013 and 21 July 2014. *See: AB4, pages 32–33 at page 32, See also: pages 143–145 at pages 144–145 and pages 7–15 at pages 12–13*

303. The Plaintiff submits that the CNC purportedly issued on 30 July 2011 but only sent to the Plaintiff on 26 August 2011 was issued under questionable circumstances, and that in any event, the EOT No. 1 Certificate dated 21 July 2011 superseded the CNC which was received first. In any event, as noted above, the Plaintiff was prevented from completing the CUB works as a result of delays by the Defendant's direct contractors which were known to the Defendant at all times and which PW2 acknowledged would result in an EOT being approved, and in such circumstances, it is submitted that the Defendant clearly ought to have granted the Plaintiff an EOT.

304. As a result of the lack of a formal EOT from the Defendant despite the assurance by PW2 that an EOT would be granted, and since the Defendant did not formally respond to the Plaintiff's objections as set out in its letter dated 29 August 2011, the Plaintiff applied for an EOT No. 2, that is until 11 October 2011, by a letter dated 27 April 2012, under Condition 43(i), which relates to delay on the part of other persons engaged by the Defendant, being Sunway Engineering and Letrik P.J. Union. However, the Defendant did not respond to this EOT application. *See: AB4, pages 146–152*

305. The Defendant issued an undated CPC for the CUB works, certifying that the works had been completed by 11 October 2011. *See: AA10, pages 29–30*

306. *Given the sequence of events as outlined above, the Plaintiff submits that the Defendant ought to have granted an EOT in respect of the delays by the direct contractors, having already approved such an EOT based on the evidence of PW2.*

307. The Plaintiff further submits that in any event, the CNC issued by the Defendant is of no effect, as it was issued in highly questionable circumstances and was in any event, superseded by the EOT No. 1. As such, the Plaintiff submit that there was no delay in the completion of the CUB by the Plaintiff, and as such the Defendant's claim for LAD in respect thereof cannot be sustained.

[270] This court finds that in its letter dated 29 August 2011 to the defendant, the plaintiff placed on record that it had been verbally informed by the defendant that its application for an EOT will be considered and will be approved as the cause of delay is acceptable and provided for. See AB4, pp 32–33. Moreover, the defendant had already acknowledged that the delays caused by the said direct contractors was sufficient reason to grant the plaintiff and EOT, when on 21 July 2011, the defendant granted an EOT for the same reason in its EOT Certificate for Package 2, where an EOT of 106 days was granted for delays in completing the CUB by others. *See: AA10, p 15*. This court also accepts the plaintiff's witnesses' evidence that at the site meetings at the material times contemporaneous with the occurrence of the delays by

Sunway Engineering and Letrik PJ Union, the matters pertaining to these delays and the extension of time were discussed and the site defendant's site staff also coordinated and interfaced on the dates for lifting the on-hold instructions and for allowing the plaintiff to continue with the remaining works which was put on hold at the CUB. The nature of interfacing of inter-related works of the plaintiff and the various direct specialist contractors at the CUB, the building which housed the various mechanical and electrical equipment and installations for the airport upgrading and extension was such that the defendant's site staff and the consultants were fully aware of the delay events. In the entire circumstances, this court finds that in the particulars circumstances of works at the CUB at the material times the plaintiff has sufficiently complied with the notice and submission procedure application for extension of time.

[271] In Letrik PJ Union's letter dated 25 July 2011, Letrik PJ Union stated the equipment for the CUB (outside the plaintiff's scope of works) would only be delivered in September 2011 and due to its large size the equipment had to be brought into CUB through the roof. Sunway Engineering Sdn Bhd (Mechanical Works) stated in its letter dated 9 September 2011 that the chiller plant equipment it was required to install was also huge and had to be installed through an opening in the wall.

[272] After Sunway Engineering's request dated 9 September 2011 to hold the balance works until the mechanical equipment was installed, Sunway Engineering would take some time to carry out the installation and testing of the mechanical equipment before the plaintiff could carry on with the balance works at the CUB. Similarly for Letrik PJ Union whose large-size equipment was expected to be brought into CUB through the roof in September 2011, after delivery of the equipment through the CUB roof in September 2011, Letrik PJ Union would take some time to carry out the installation and testing of the electrical equipment before the plaintiff could carry on with the balance roof works at the CUB. By the nature and sequencing of construction activities, the roof covering and the floor finishes for the CUB building, a building structure which houses the mechanical and electrical equipment and installations to serve the need of a separate main building of relatively much bigger size and complexity, are the tail-end construction activities to be executed at the CUB building shortly before the practical completion of works at the CUB building. The combined effect of putting the roof covering and the floor finish on hold pending the other M&E works of Letrik PJ Union and Sunway Engineering was to postpone the execution of the plaintiff's tail-end works on roofing and floor finish at the CUB for more than two months, thereby causing delay to the plaintiff's practical completion of the plaintiff's works at the CUB. In the premises this court has held that the plaintiff was entitled to extension of time until 11 October 2011 for the completion of the

works in CUB. As the SO has certified the CUB practical completion was achieved on 11 October 2011, no LAD could be imposed by the defendant in respect of the CUB works.

[273] Further or alternatively, it is fundamental principle of law that a party cannot benefit from or take advantage of its own wrong: *Roberts v The Bury Improvement Commissioners* (1869) LR 4 CP 755 (English Court of Appeal), which was approved by the Privy Council in *Lodder v Slowey* [1904] AC 442 (Privy Council appeal from New Zealand); dictum of Scott LJ in *Leyland (Frederick) & Co Ltd v Compania Panamena Europea Navigacion Ltda* [1943] 76 Lloyd's Report 113 (English Court of Appeal), at p 127 which was approved by House of Lords: judgment of Lord Thankerton at [1947] AC 428H at p 436; *Gimstern Corporation (M) Sdn Bhd & Anor v Global Insurance Co Sdn Bhd* [1987] 1 MLJ 302; [1987] CLJ Rep 102 (SC); *Golden Vale Gold Range & Country Club Sdn Bhd v Hong Huat Enterprise Sdn Bhd (Airport Auto Centre Sdn Bhd & Anor, third party and another appeal)* [2008] 4 MLJ 839; [2008] 6 CLJ 31 (CA); *Multiplex Constructions (UK) v Honeywell Control Systems* 111 ConLR 78; *Bunning Bros v Manea* (1911) 13 WALR 148; *SMK Cabinets v Hili Modern Electrics Pty Ltd* [1984] VR 391 etc.

[274] As regards the origin and purpose of an extension of time clause, the basic legal principle was set in 1897 and 1904 when the appellate court in England court ruled that an employer cannot insist that a contractor finishes its works by a fixed date if it was the employer which prevented the contractor from achieving that date: *Dodd v Churton* [1897] 1 QB 562 (English Court of Appeal's decision) and *Lodder v Slowey* [1904] AC 442 (Privy Council appeal from New Zealand). This basic legal principle was based on the fundamental principle that a party cannot benefit from its own wrong. Over time, the operation of this basic legal principle in the construction contract cases has led its application to the construction cases to be commonly known as the 'prevention principle'.

[275] If the project is delayed by an event that impacts on the completion date (ie critical delay) and which falls within the ambit of one of the excusable grounds under an express clause on extension of time, then this may constitute a 'relevant event' for which the contractor may be granted an extension of time (ie excusable delay event). This can have the effect of relieving the contractor from a claim of liquidated damages. See the discussion on the prevention principle by Aliza Sulaiman JC (now J) in *Pembinaan Limbongan Setia Berhad v Josu Engineering Construction Sdn Bhd* [2020] MLJU 192; [2020] 1 LNS 111 in paras [89]–[100].

[276] However, mechanisms allowing extensions of time are not simply for the contractor's benefit. If there was no such contractual mechanism and a

delay occurred which was caused by a default or breach of contract or act of the employer, then the contractor could no longer be required to complete the works by the completion date and would only have to complete the works in a 'reasonable' time. With no contractual mechanism to grant extension of time so as to separate the delay within the contractor's responsibility from the delay within the employer's responsibility, the entire delay becomes a mixture of the delay within the contractor's responsibility and the delay within the employer's responsibility, with the legal consequence that by operation of the principle that a party cannot benefit from its own wrong, the employer is not entitled to impose liquidated damages against or recover damages from the contractor while, likewise, the contractor is not entitled to recover any loss/expense or damages from the employer for any default or breach of contract. This is the sum total effect of the combined operation of legal principles relating to liquidated damages and extension of time, as derived from numerous decided cases including those cited in para 271 above, and the judgment of the Supreme Court of Victoria in SMK Cabinets case *SMK Cabinets v Hili Modern Electrics* [1084] VR 391 has set out a detailed discussion of this legal principle together with references to numerous decided authorities. The case of *Pembinaan Limbongan Setia Berhad v Josu Engineering Construction Sdn Bhd* [2020] MLJU 192 ; [2020] 1 LNS 111 and other decided authorities cited in para 271 have established such principle that a party cannot benefit from or take advantage of its own wrong or default.

[277] Due to probably insufficient understanding of the history and underlying rationale of the extension of time clause, many lawyers and consultants have in the recent decades started to make the contractual procedure for applying for extension of time very complicated and rigid and in contractually stipulating that any non-compliance with such contractual procedure for applying for extension of time would deprive the contractor of the right to be granted any extension of time or would render the contract administrator powerless to grant any extension of time. This strict clause serves the employer's interest in scenarios where the excusable delay events are neutral events which are not caused by any act, default or breach of the employer (for example, *force majeure*, contractor's inability to procure labour or materials). Nevertheless, in scenarios where the excusable delay events are caused by any act, default or breach of the employer (for example, delay in giving site possession, late instructions, delay in executing other works not forming part of the contractor's scope, variation instruction, etc), the absence of the grant of extension of time would throw the contracting parties' positions back to the scenario where the entire delay becomes a mixture of the delay within the contractor's responsibility and the delay within the employer's responsibility, with the legal consequence that by operation of the principle that a party cannot benefit from its own wrong, the employer is not entitled to impose liquidated damages against or recover damages from the contractor while, likewise, the contractor is not entitled to recover any loss/expense or damages

from the employer for any default or breach of contract.

[278] Delays by the employer's other direct contractors (ie Sunway Engineering and Letrik PJ Union) are excusable delay events under the main contract here: see cl 43(i) of the conditions of contract in *AA3/437*. As between the plaintiff-contractor and the defendant-employer, any default or breach or delay on the part of the employer's other direct contractors is deemed to have been caused by or within the responsibility of the employer.

[279] In light of the abovementioned legal principles, the defendant's argument regarding the plaintiff's failure to timeously give written notice of delay in respect of the excusable delay events by the employer's other direct contractors (ie Sunway Engineering and Letrik PJ Union) is of no assistance to the defendant-employer's claim for liquidated damages here. It is clear that the delays by these two other direct contractors (ie Sunway Engineering and Letrik PJ Union) caused critical delay to the practical completion of the plaintiff's CUB works until after 9 September 2011, and without an extension of time separate these excusable delays caused by or within the responsibility of the employer, the delay period between 29 July 2011 (the extended date for completion) and 11 October 2011 (the certified date of practical completion) a mixture of the delay within the contractor's responsibility and the delay within the employer's responsibility, with the legal consequence that by operation of the principle that a party cannot benefit from its own wrong, the employer is not entitled to impose liquidated damages against or recover damages from the contractor while, likewise, the contractor is not entitled to recover any loss/expense or damages from the employer for any default or breach of contract.

[280] In *Syarikat Tan Kim Beng & Rakan-Rakan v Pulai Jaya Sdn Bhd* [1992] 1 MLJ 42; [1991] 1 LNS 52 Peh Swee Chin J (later FCJ) held that in a situation where the SO actually knew of the occurrence of the delay event, written notice of that delay event is not necessary. Clear examples of the SO having actual knowledge of the delay event include a situation where the employer or the SO instructs, at a site meeting or by way of any written communication copied to various parties including the SO, the contractor to suspend or put on hold the remaining works at a stage where the project works is almost practically completed, as is the factual situation here regarding the CUB Works.

[281] In our present case, this court accepts the plaintiff's evidence that the SO and/or his/her authorised representatives knew of the occurrence of delay events regarding the putting the plaintiff's remaining works at the CUB in abeyance or on hold pending the execution of the other works of the direct contractors Sunway Engineering and Letrik PJ Union until after 9 September

2011. In the circumstances, this court holds that there is no procedural prohibition against the assessment and grant of reasonable extension of time on merits regarding the delay events occasioned by the direct contractors Sunway Engineering and Letrik PJ Union to the CUB works.

[282] From Sunway Engineering's letter dated 9 September 2011 requesting the plaintiff to put on hold some CUB works pending the execution of Sunway Engineering's mechanical equipment and installations inside the CUB, it is clearly that Sunway Engineering's said works were still not completed as at 9 September 2011 and then Sunway Engineering's weeks would take some time after 9 September 2011 to be completed. It goes without saying that after Sunway Engineering's said works, the plaintiff would also require some time thereafter to execute and complete its remaining works which was put on hold. In the circumstances, this court finds that a reasonable extension of time should be granted for the plaintiff's practical completion of the CUB works until 11 October 2011.

[283] Alternatively even if the plaintiff were assumed to be not entitled to any further grant of extension of time beyond 29 July 2011 by reason of non-compliance with the notice requirements as contended by the defendant, the defendant is still not entitled to impose or recover any liquidated damages or delay damages in respect of CUB works for the delay period between 29 July 2011 and 11 October 2011 by virtue of the principle that a party cannot benefit of its own wrong (or the prevention principle) because factually, the delay in the practical completion of the CUB works during the said period was caused or contributed by default or act within the responsibility of the defendant.

[284] In the premises, this court has dismissed the defendant's counterclaim for liquidated damages in respect of the CUB Works.

THE DEFENDANT'S COUNTERCLAIM FOR LIQUIDATED DAMAGES IN RESPECT OF ADW WORKS

[285] The defendant's counterclaim is premised on the basis that the plaintiff failed to complete the ADW works by the ADW completion date of 31 December 2011, which is certified by way of the ADW CNC *(AA10/26–27)*. The ADW works were only practically complete on 14 July 2014 *(WS-DW1/29; WS-DW3/21)* and as such, the defendant submits that there is a delay of a total of 925 days in the completion of the ADW works. Based on that, it is the defendant's case that it is entitled to the sum of RM9,250,000, being liquidated damages calculated based on 925 days of delay at a rate of RM10,000 per day

[286] In respect of the ADW works, not a single day of extension of time was ever granted by the SO in this project.

[287] In supporting its counterclaim for the liquidated damages in respect of ADW works, the defendant sets out in detail its arguments and evidence in paras 654–845 of the defendant's written submissions and paras 359–435 of the defendant's reply submissions.

[288] The reasons relied upon by the defendant can be summarised as follows:

(a) there are various alleged EOT applications relating to the ADW works relied on by the plaintiff which, according to the defendant's submissions, are not valid;

(b) the plaintiff's EOT Application relating to the ADW works have been assessed by the defendant and it is the defendant's contention that the plaintiff is not entitled to any further extensions of time;

(c) it is the defendant's position that the delays were not caused by the cofferdam or raft foundation as alleged by the plaintiff; and

(d) it is the defendant's position that the time for completing the ADW works was not at large as alleged by the plaintiff.

[289] In opposing the defendant's counterclaim for liquidated damages in respect of the ADW works, the plaintiff disputes the defendant's entitlement to this counterclaim on the basis that it is entitled to extensions of time to complete the ADW works, that time for completing the ADW works is at large and that it challenges the validity of the ADW CNC.

[290] The details of the plaintiff's submissions against the imposition of Liquidated Damages in respect of the ADW works are set out in paras 308–356 of the plaintiff's written submissions and paras 516–623 of the plaintiff's reply submissions.

[291] After having heard and considered the witnesses' evidence in light of the contemporaneous documentary evidence, this court finds as follows in respect of the ADW works:

(a) the original date for completion of ADW was 31 December 2011;

(b) there was no extension whatsoever granted by the SO in respect of ADW works;

(c) the original contract design of the foundation for pump sumps/outlets was done without the benefit of any borehole test or Mackintosh probe

result for the pump sump location: *AB5 pp 165–168, see also Notes of Evidence 13 August 2020, p 47. Notes of Evidence 24 February 2021, p 12.*

(d) 24 meter reinforced concrete (RC) piles were originally designed for the pump sumps/outlets, but hard layer of rock material encountered at about 7 meter deep after the Mackintosh probes were carried out subsequent to the award of the Package 1 Works to the plaintiff;

(e) this hard layer of rock material at about 7 meter depth below the ground surface was not known or foreseen by the design consultant, and also could not be reasonably foreseen by the plaintiff-contractor at the time of tender and making of the contract;

(f) the hard layer of rock material at about 7 meter depth below the ground surface at the pump sump/outlet locations was not something which a tenderer could have discovered by way of pre-tender inspection or examination of the project site;

(g) the unforeseen existence of this layer of rock material at about 7 meter depth below the ground surface at the pump sump/outlet locations was not something which had been catered for in the original foundation structural design of pump sumps/outlets which used 24 meter-length RC piles and upon being discovered after the award of the contract, became a design-related problem or issue which needed to be addressed;

(h) the originally-specified foundation structure design using 24m-length RC piles also posed safety problems as some of the pump sump/outlets are located very near the airport runway for landing and take-off of aircrafts. This was confirmed by the defendant's previous project manager PW2 in his evidence: see *Notes of Evidence 14 August 2020, p 14*;

(i) as early as March 2011, the plaintiff highlighted design-related and safety problems and asked for design review, design details and solutions: see *AB4/85, 91, 18–19, Notes of Evidence, 14 August 2020, pp 14–15*;

(j) the plaintiff was justified in highlighting design-related and safety problems and asking for design review, design details and solutions because:

(i) the pump sumps were located very close to the airport runway for aircrafts;

(ii) the hard layer encountered in the Mackintosh probe was unforeseen or unexpected;

(iii) the presence of the hard layer at 7 meter depth level at the pump sump which required 24 meter length of piles would pose design-related problems;

(iv) if the original design of square piles was to be used for foundation

of pump sump, piling rig and other related sizeable machinery would have to be used at the side of the runway, and the height of piling rig would pose danger to aircrafts (see photographs in encl 124 pp 8–15 for the sizes and heights of piling rig, A-frame and crawler crane for use in diving piles); and

(v) the safety concern warranted specific instructions from the SO.

(k) from March 2011 to early Dec 2011, the consultant engineer ZL did not issue any written letter or response;

(l) neither has the SO issued any specific instructions or suggest any practical and workable solution;

(m) after waiting for months without any specific response from the defendant or the SO or the consultant engineer ZL, in July 2012 the plaintiff-contractor proposed a design-related solution and an alternative design of using raft foundation design instead of square pile foundation for the pump sump, and this alternative design proposal would obviate the necessity of using any piling rig, A-frame or crawler crane: see *AB16, pp 32–34, See also Notes of Evidence 14 August 2020, pp 15–16*;

(n) the plaintiff's alternative design for raft foundation for the pump sump was accepted and approved by the SO and/or ZL;

(o) throughout the course of the project (which lasted for several years) and throughout the course of this suit, none of the plaintiff's design consultants or witnesses has suggested any other specific practical and realistic alternative solution which could effectively solve the safety problem and the design-related problem in connection with the original foundation design of the pump sumps/outlets. None of the defendant's witnesses has suggested or proven that the defendant was prepared to close the runway for significant period of time to accommodate the use of piling rig and A-frame or crawler crane for the installation of the reinforced concrete piles at the pump sump and pump outsets very near the runway;

(p) upon obtaining the approval for the alternative raft foundation, the plaintiff proceeded with the construction of the pump sump without any use of piling rig or crawler crane;

(q) by June 2013, the pump sump RC structures had been completed and the pumps installed and was functioning, except for test and commissioning: see *AB4/5*;

(r) testing and commissioning of the pumps was delayed until January 2014 due to delay in power supply: see *AB4/5, 47–62*;

(s) power supply works were under Letrik PJ Union, a different contractor of the defendant;

(t) after January 2014, there was additional works on concrete covers which the M&E consultant by letter dated 25.02.2014 instructed on behalf of the SO to cover all the drainage areas of all pump sumps: see *AB4/63–64*;

(u) the additional works on concrete covers were completed on 30 April 2014: see *AB4/5–6*;

(v) the revised works of ADW (including the additional works on concrete covers) were substantially completed on 30 April 2014 except for some smaller balance items.

(w) apart from the above, there were also additional works in the ADW which caused delay to the completion of the ADW works, such as sheet piles/cofferdams: see *AB4/1–6, 34, 35, 91, 92, 146–152; WS-PW1, Q&A 39*;

(x) however, the plaintiff did not promptly complete the smaller balance items ADW works, thereby delaying the inspection for handover of the DW works;

(y) eventually, the completed ADW works were hand over by the plaintiff to the defendant and certified by the SO as practically completed on 14 July 2014; and

(z) in the circumstances, this court finds that the plaintiff's works at the ADW (including testing and commissioning of pumps and the additional works on concrete covers) was physically completed on 30 April 2014 without any culpable delay on the part of the plaintiff-contractor.

[292] The raft foundation for the pump sumps/outlets constituted variation works within the meaning of cl 24 of the conditions of contract, as it was 'alteration of the design, quality or quantity of the Works as shown upon the contract drawings, bills of quantities and/or Specifications' and/or 'alteration in the kind of materials …'. The instruction on the alteration of design should have been issued by the SO under cl 5 to solve the safety problem and the design-related problem timeously. As the SO has delayed in the issuance of such instruction on alteration of design to solve the safety problem and the design-related problem, the plaintiff-contractor is entitled to an extension of time.

[293] This court therefore finds that the plaintiff-contractor was entitled to extension of time for ADW works until 30 April 2014. Accordingly, this court hereby grants to the plaintiff-contractor the extension of time for the ADW works until 30 April 2014.

[294] By way of DW3's letter dated 19 June 2014 to the plaintiff, DW3

informed the plaintiff that the inspection on 18 June 2014 had been aborted due to the outstanding works which had yet to be completed *(AB16/204)*. The plaintiff has not adduced specific and sufficient evidence to substantiate further extension beyond 30 April 2014 for the practical completion of the ADW works. As the balance items of ADW works were not completed promptly resulting in further delay until July 2014 before the CPC inspection was carried out and the S.O certified CPC as achieved on 14 July 2014, the plaintiff-contractor was not entitled to further extension of time beyond 30 April 2014 for the practical completion of ADW works.

[295] In the circumstances, this court finds and holds that the defendant is not entitled to impose any LAD in respect of ADW works for any period up to 30 April 2014, but the defendant is entitled to LAD in respect of ADW works for the period from 1 May 2014 to 14 July 2014.

[296] Under the Package 1 (Site Office, CUB and ADW), the LAD rate for ADW is RM10,000 per day. The defendant has not produced evidence to show this rate of RM10,000 was exorbitant or unreasonable. Hence, the total LAD which the defendant is entitled to impose against the plaintiff in respect of ADW works was: RM10,000 per day x 75 days = *RM750,000*.

[297] As this court has granted the extension of time until 30 April 2014 for the ADW works, it is not necessary for this court to consider and decide whether or not the contract time for ADW works were set at large or whether the prevention principle (ie a party cannot benefit from its own wrong) would deprive the defendant-employer the right to impose or claim liquidated damages in respect of ADW works for the period after 30 April 2014. Suffice it be said that the end result in such alternative scenario would be worse for the defendant-employer. Even if the plaintiff were not entitled to extension of time due to any technical or procedural reason, the defendant is still not entitled to impose or recover any LAD against the plaintiff in respect of the period until 30 April 2014 or even subsequent to 30 April 2014 for ADW works. This is because by the defendant's acts, neglect, default and/or breaches including those summarised in items (1) to (26) of para 329 above the defendant contributed to or at least jointly caused the delay in the completion of the ADW works. Under the principle of law that a party cannot benefit from his own wrong, the defendant who contributed or jointly caused the delay cannot benefit from the delay by claiming LAD from the opposite party, the plaintiff here. *Pembinaan Limbongan Setia Berhad v Josu Engineering Construction Sdn Bhd* [2020] MLJU 192 ; [2020] 1 LNS 111 and other decided authorities have established such principle that a party cannot benefit from or take advantage of its own wrong or default.

A FINANCE CHARGES AND/OR INTEREST

[298] A claim for finance charges is a claim for special damages and has to be proved specifically by documentary evidence on the actual expenses of financing incurred due to the delay in payment.

B

[299] In order to claim finance charges as special damages, a plaintiff has to prove documents on bank loans and/or financing facilities taken by the plaintiff, the actual amounts of financing charges paid or payable to the banks and/or lenders during the relevant period of time.

C

[300] In the present case, the plaintiff has not adduced specific proof of any bank loan or credit facilities or the actual amount paid or payable to the banks As such, there is no valid basis to consider or award special damages in the form of finance charges.

D

[301] On the other hand, pre-judgment interests on the judgment sum may be awarded as interest in the usual way by the court in exercise of the court's discretion.

E

[302] In the circumstances of the present case and bearing in mind the commercial nature of the building contract, this court finds that the usual pre-judgment interest at simple interest rate of 5%pa should be awarded on the judgment sum which represent the unpaid values of works done and materials delivered.

F

[303] In respect of the judgment sum of Package 1 Works (Site Office, CUB and ADW), the CUB was certified as practically completed and taken into possession by the defendant on 11 October 2011 and the Site Office was completed and taken over earlier than 11 October 2011. ADW was certified as practically completed on 14 July 2014. In exercise of discretion, this court awards the simple interest of 5%pa on the judgment sum for Package 1 Works to start from 14 July 2016 until the date of full realisation.

G

H

[304] The Package 2 Works (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) were certified as practically completed and taken over progressively in multiple zones, with the latest being 27 June 2015. In exercise of discretion, this court awards the simple interest of 5%pa on the judgment sum for Package 2 works to start from 27 June 2015 until the date of full realisation.

I

CONCLUSION

Summing-up for Package 1 Contract (Site Office, CUB and ADW)

[305] This court finds that the total value of works done and materials delivered in Package 1 Contract (Site Office, CUB and ADW) is *RM20,148,621.50.*

Cumulative total amounts paid by the defendant to the plaintiff for works done and materials delivered under Package 1 Contract (Site Office, CUB and ADW) = *RM18,112,100*.

Total value of works done and materials delivered in Package 1 — Cumulative total amounts paid by the defendant to the plaintiff for works done and materials delivered under Package 1 Contract

= *RM20,148,621.50 - RM18,112,100*

= *RM2,036,521.50.*

Therefore, this court awards *RM2,036,521.50* as the balance amount payable by the defendant to the plaintiff for works done and materials delivered under Package 1 Contract (Site Office, CUB and ADW).

S*umming-up for Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge)*

[306] This court finds that the total value of works done and materials delivered in Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) is *RM181,449,614.73.* Cumulative total amounts paid by the defendant to the plaintiff for works done and materials delivered under Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge) = *RM172,806,700.*

Total value of works done and materials delivered in Package 2 — Cumulative total amounts paid by the defendant to the plaintiff for works done and materials delivered under Package 2 Contract

= *RM181,449,614.73 - RM172,806,700.*

= *RM8,642,914.73.*

Therefore, this court awards *RM8,642,914.73* as the balance amount payable by the defendant to the plaintiff for works done and materials delivered under Package 2 Contract (Terminal Building, Transfer Corridor, Passenger Boarding Bridge).

[307] This court has dismissed the plaintiff's claim for acceleration costs.

[308] This court has dismissed the plaintiff's claim for prolongation costs and/or loss/expense.

[309] This court has dismissed the plaintiff's claim for financing charges, but allows pre-judgment interests and post-judgment interests at the simple rate of 5%pa.

[310] This court has dismissed the defendant's counterclaim for liquidated damages in respect of CUB works in Package 1 Contract.

[311] This court has allowed part of the defendant's counterclaim for liquidated damages in respect of ADW works in Package 1 Contract to the extent and in the amount of *RM750,000*.

[312] After set off the Package 1 liquidated damages against the balance value of works payable in respect of Package 1 Contract (Site Office, CUB and ADW), the judgment sum for Package 1 Contract (Site Office, CUB and ADW) is *RM2,036,521.50 - RM750,000 = RM1,286,521.50.*

Order accordingly.

Reported by Ashok Kumar